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## Matemáticas Grado 5°

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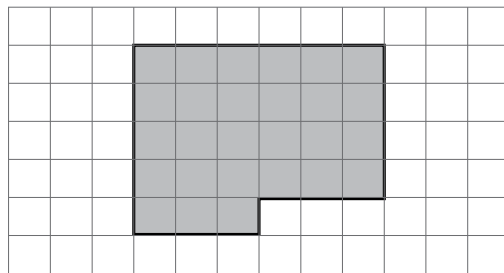




## GRADO 5° - PRUEBA DE MATEMÁTICAS

### • Pregunta 1.

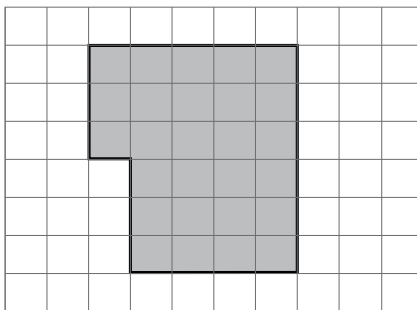
Observa la figura.



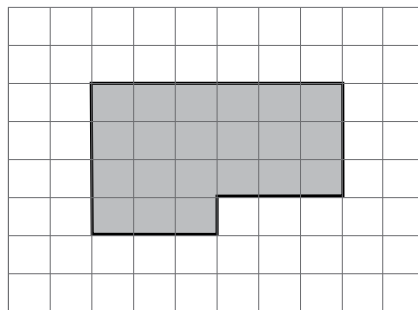
**Figura**

¿Cuál de las siguientes figuras tiene la misma forma y la misma área?

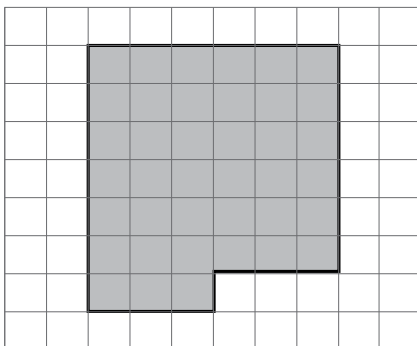
A.



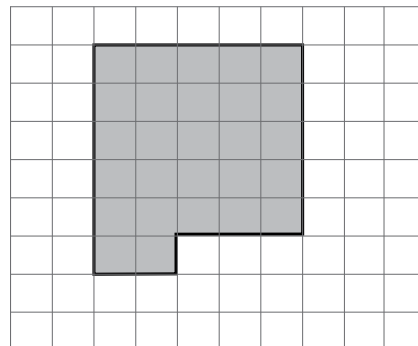
B.



C.



D.



• Estructura

<b>Competencia</b>	Razonamiento
<b>Componente</b>	Espacial - métrico
<b>Afirmación</b>	Justificar relaciones de semejanza y congruencia entre figuras.
<b>Nivel de desempeño</b>	Mínimo
<b>Respuesta Correcta</b>	A

• Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	43.9%	26.7%	19.3%	8.1%	2.1%	857
Antioquia	58.6%	20.3%	11.7%	6.5%	3.0%	27707
Apartadó	55.1%	23.4%	13.3%	7.5%	0.7%	1680
Arauca	61.6%	21.6%	10.5%	4.7%	1.6%	2693
Armenia	65.3%	20.2%	8.2%	5.6%	0.7%	2699
Atlántico	50.4%	23.5%	15.8%	8.8%	1.4%	5754
Barrancabermeja	58.1%	20.3%	13.6%	7.4%	0.5%	2577
Barranquilla	56.0%	21.8%	14.6%	6.6%	1.0%	11975
Bello	62.0%	20.4%	10.2%	5.8%	1.6%	3913
Bogotá, D.C.	67.8%	17.8%	8.4%	5.0%	1.0%	66042
Bolívar	44.9%	25.1%	18.5%	9.4%	2.2%	10443
Boyacá	61.7%	20.5%	11.0%	5.8%	1.1%	9417
Bucaramanga	70.3%	15.4%	8.0%	5.2%	1.2%	5470
Buenaventura	52.4%	22.2%	15.6%	8.2%	1.6%	3465
Buga	62.4%	20.6%	8.8%	5.4%	2.8%	1155
Caldas	60.9%	21.4%	10.6%	5.8%	1.2%	5757
Calí	61.6%	20.1%	11.0%	5.3%	2.0%	18791
Caquetá	57.5%	19.9%	13.4%	6.5%	2.7%	3275
Cartagena	54.3%	22.5%	14.5%	7.4%	1.3%	10845
Cartago	61.0%	22.0%	10.3%	4.4%	2.2%	1125
Casanare	59.5%	21.8%	11.3%	5.1%	2.3%	2969
Cauca	57.7%	19.9%	12.6%	6.4%	3.4%	12305
Cesar	61.5%	18.6%	12.2%	6.2%	1.5%	8248
Chocó	43.2%	24.5%	19.8%	9.0%	3.5%	3825
Chía	71.1%	15.8%	9.2%	3.2%	0.7%	1326
Ciénaga	49.4%	24.4%	15.3%	8.4%	2.5%	1361
Cundinamarca	63.6%	20.1%	9.4%	5.2%	1.8%	16079
Córdoba	47.9%	24.0%	17.7%	8.9%	1.4%	13337

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Cúcuta	62.2%	20.7%	10.4%	6.2%	0.5%	7496
Dosquebradas	67.2%	18.0%	8.9%	4.9%	0.9%	1718
Duitama	71.6%	16.1%	6.8%	4.7%	0.7%	1259
Envigado	74.4%	13.4%	6.1%	5.8%	0.3%	1435
Facatativá	64.8%	22.6%	8.2%	4.1%	0.3%	1342
Florencia	61.2%	22.2%	10.5%	5.6%	0.6%	1996
Floridablanca	69.6%	16.8%	7.6%	5.2%	0.7%	2565
Fusagasugá	67.0%	17.8%	9.5%	4.9%	0.8%	1396
Girardot	52.7%	25.6%	12.9%	7.8%	1.0%	990
Girón	65.4%	17.9%	10.1%	4.8%	1.8%	1355
Guainía	47.6%	26.4%	13.7%	8.7%	3.6%	504
Guaviare	57.9%	23.6%	11.1%	5.7%	1.7%	821
Huila	58.9%	21.9%	12.2%	5.9%	1.1%	8363
Ibagué	64.9%	19.7%	9.5%	4.9%	1.0%	5169
Ipiales	63.0%	20.7%	9.9%	5.5%	0.9%	1298
Itagüí	64.7%	19.5%	9.0%	6.0%	0.8%	1820
Jamundí	59.0%	23.1%	11.2%	5.8%	0.9%	1113
La Guajira	50.2%	22.6%	17.3%	7.9%	1.9%	3445
Lorica	49.2%	20.8%	17.1%	11.0%	1.8%	1487
Magangué	46.7%	25.9%	16.3%	7.8%	3.3%	1440
Magdalena	47.2%	24.4%	17.8%	8.1%	2.5%	8792
Maicao	46.7%	25.2%	18.5%	8.5%	1.2%	2063
Malambo	57.3%	20.4%	14.4%	6.8%	1.1%	1323
Manizales	66.5%	17.2%	10.0%	5.5%	0.8%	3033
Medellín	60.0%	21.5%	9.9%	7.3%	1.3%	20127
Meta	59.2%	21.1%	12.4%	5.1%	2.1%	5660
Montería	52.9%	22.8%	15.5%	7.6%	1.1%	5224
Mosquera	67.2%	17.5%	9.5%	5.4%	0.3%	1180
Nariño	61.8%	19.1%	11.3%	6.2%	1.5%	9260
Neiva	57.7%	23.1%	12.8%	5.8%	0.6%	3792
Norte de Santander	58.8%	22.0%	11.2%	6.7%	1.3%	7570
Palmira	65.6%	18.5%	9.3%	5.5%	1.1%	2806
Pasto	65.7%	18.1%	9.3%	6.3%	0.7%	4302
Pereira	66.7%	17.8%	9.3%	5.3%	0.9%	4556
Piedecuesta	66.1%	18.5%	10.0%	5.0%	0.4%	1479
Pitalito	61.3%	21.0%	12.0%	4.8%	0.9%	1677
Popayán	64.3%	19.3%	10.1%	4.8%	1.4%	2769
Putumayo	60.3%	21.2%	9.8%	5.9%	2.7%	4103
Quibdó	43.4%	27.4%	17.9%	8.7%	2.6%	1464

Continúa en la siguiente página

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Quindío	64.0%	19.6%	10.0%	5.3%	1.1%	2675
Riohacha	49.6%	23.9%	17.6%	7.7%	1.2%	2510
Rionegro	65.7%	17.2%	8.9%	7.3%	0.9%	1163
Risaralda	63.5%	19.3%	9.9%	5.9%	1.4%	2976
Sabaneta	57.7%	19.9%	9.2%	4.9%	8.3%	568
Sahagún	58.4%	20.0%	13.8%	7.3%	0.5%	1250
San Andrés	53.8%	27.1%	11.6%	6.4%	1.0%	483
Santa Marta	54.6%	22.6%	14.2%	7.2%	1.4%	5685
Santander	64.5%	18.8%	10.2%	5.7%	0.7%	8527
Sincedejo	54.7%	21.7%	13.7%	7.6%	2.2%	3151
Soacha	61.1%	22.5%	10.5%	5.1%	0.8%	5303
Sogamoso	61.7%	20.8%	9.5%	4.7%	3.3%	1529
Soledad	58.8%	20.0%	13.6%	6.8%	0.8%	5389
Sucre	46.0%	25.5%	18.3%	9.1%	1.1%	7453
Tolima	57.9%	22.5%	11.9%	6.3%	1.4%	9821
Tuluá	66.7%	18.2%	10.6%	4.0%	0.6%	2187
Tumaco	42.0%	25.4%	20.0%	9.5%	3.1%	2677
Tunja	69.3%	16.7%	8.2%	4.9%	0.9%	1705
Turbo	42.5%	26.6%	18.0%	9.9%	3.1%	1698
Uribe	41.8%	25.2%	19.8%	10.6%	2.5%	987
Valle del Cauca	61.0%	22.3%	10.3%	4.9%	1.5%	9044
Valledupar	56.1%	20.6%	13.1%	6.3%	3.9%	5252
Vaupés	41.2%	25.2%	21.4%	9.7%	2.5%	238
Vichada	55.8%	21.7%	14.5%	7.7%	0.3%	351
Villavicencio	65.4%	19.2%	9.6%	5.0%	0.8%	5502
Yopal	65.9%	20.5%	8.4%	4.1%	1.1%	1833
Zipaquirá	65.3%	20.1%	9.0%	5.3%	0.4%	1373
Colombia	59.7%	20.7%	11.8%	6.3%	1.5%	484612

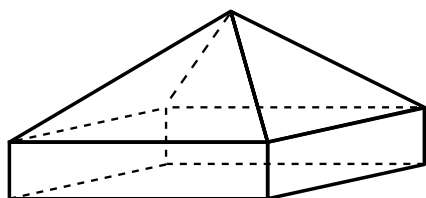
\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.







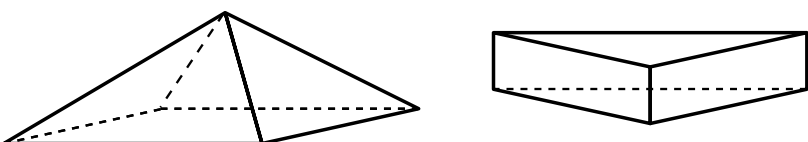
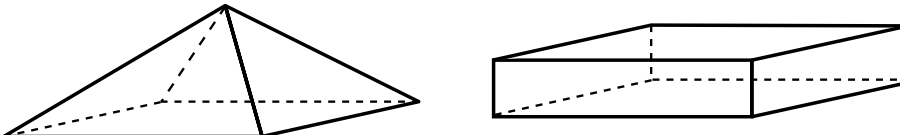
- **Pregunta 2.**

Se quiere armar el sólido que aparece en la figura utilizando dos piezas.



**Figura**

¿Con cuál par de piezas se puede armar el sólido?

- A. 
- B. 
- C. 
- D. 

- **Estructura**

<b>Competencia</b>	Razonamiento
<b>Componente</b>	Espacial - métrico
<b>Afirmación</b>	Construir y descomponer figuras planas y sólidos a partir de condiciones dadas.
<b>Nivel de desempeño</b>	D
<b>Respuesta Correcta</b>	Mínimo

## • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	6.1%	15.5%	13.9%	62.4%	2.1%	857
Antioquia	4.7%	9.9%	15.4%	66.4%	3.7%	27707
Apartadó	5.6%	11.5%	16.1%	65.7%	1.1%	1680
Arauca	2.8%	7.7%	14.9%	72.4%	2.2%	2693
Armenia	4.3%	7.2%	14.5%	72.5%	1.5%	2699
Atlántico	4.7%	10.0%	17.6%	65.5%	2.2%	5754
Barrancabermeja	5.2%	9.0%	14.8%	70.2%	0.7%	2577
Barranquilla	4.1%	8.4%	14.6%	71.4%	1.5%	11975
Bello	4.8%	8.7%	13.3%	71.3%	1.9%	3913
Bogotá, D.C.	3.3%	6.3%	12.9%	76.2%	1.4%	66042
Bolívar	6.9%	13.0%	19.5%	57.9%	2.7%	10443
Boyacá	4.0%	6.9%	16.8%	70.9%	1.3%	9417
Bucaramanga	3.1%	5.6%	12.6%	77.3%	1.4%	5470
Buenaventura	5.2%	9.4%	15.5%	67.2%	2.8%	3465
Buga	4.8%	9.1%	15.2%	67.9%	3.0%	1155
Caldas	4.2%	8.8%	17.0%	68.6%	1.4%	5757
Cali	4.1%	8.1%	13.3%	72.0%	2.6%	18791
Caquetá	4.4%	10.1%	17.1%	65.2%	3.2%	3275
Cartagena	4.7%	10.2%	15.3%	67.8%	2.0%	10845
Cartago	4.5%	8.7%	15.4%	68.9%	2.5%	1125
Casanare	3.6%	8.6%	13.3%	72.0%	2.5%	2969
Cauca	4.6%	9.9%	15.6%	65.7%	4.2%	12305
Cesar	4.8%	11.7%	16.7%	65.0%	1.8%	8248
Chocó	7.0%	15.8%	20.8%	51.8%	4.7%	3825
Chía	2.3%	5.2%	13.7%	78.1%	0.8%	1326
Ciénaga	4.6%	11.5%	16.4%	64.7%	2.9%	1361
Cundinamarca	3.5%	6.7%	14.0%	73.8%	2.0%	16079
Córdoba	5.7%	12.7%	17.9%	61.7%	2.0%	13337
Cúcuta	3.8%	7.4%	14.8%	73.2%	0.8%	7496
Dosquebradas	3.8%	8.1%	14.6%	72.0%	1.6%	1718
Duitama	2.4%	4.1%	12.0%	81.0%	0.5%	1259
Envigado	3.1%	7.7%	9.9%	78.7%	0.6%	1435
Facatativá	3.6%	6.7%	15.3%	73.5%	1.0%	1342
Florencia	3.8%	9.7%	14.6%	70.9%	1.0%	1996
Floridablanca	3.3%	6.4%	10.7%	78.6%	1.1%	2565
Fusagasugá	3.7%	6.3%	15.9%	73.0%	1.1%	1396
Girardot	4.9%	13.7%	17.4%	62.4%	1.5%	990
Girón	4.1%	7.6%	12.5%	73.4%	2.4%	1355
Guainía	6.2%	14.9%	13.9%	62.1%	3.0%	504

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Guaviare	6.2%	13.3%	15.7%	61.8%	3.0%	821
Huila	3.8%	7.7%	15.9%	71.2%	1.4%	8363
Ibagué	3.3%	7.3%	14.0%	73.9%	1.4%	5169
Ipiales	3.7%	6.5%	14.6%	74.3%	1.0%	1298
Itagüí	5.1%	12.6%	13.8%	67.2%	1.3%	1820
Jamundí	5.1%	10.0%	17.8%	66.3%	0.8%	1113
La Guajira	6.0%	13.2%	17.1%	61.2%	2.4%	3445
Lorica	5.7%	13.5%	18.5%	59.7%	2.6%	1487
Magangué	5.1%	10.3%	17.1%	63.8%	3.6%	1440
Magdalena	6.5%	13.3%	18.7%	58.5%	3.1%	8792
Maicao	6.1%	13.3%	18.9%	60.1%	1.6%	2063
Malambo	3.3%	7.1%	14.9%	73.2%	1.6%	1323
Manizales	3.6%	6.3%	14.4%	74.6%	1.1%	3033
Medellín	5.3%	11.4%	15.6%	66.0%	1.7%	20127
Meta	3.7%	8.6%	13.6%	71.8%	2.3%	5660
Montería	4.9%	10.1%	16.3%	67.2%	1.4%	5224
Mosquera	3.5%	6.9%	11.6%	77.3%	0.7%	1180
Nariño	3.5%	6.9%	15.7%	71.9%	2.0%	9260
Neiva	3.7%	8.4%	14.3%	72.8%	0.8%	3792
Norte de Santander	4.1%	8.0%	15.0%	71.1%	1.7%	7570
Palmira	3.7%	6.9%	13.7%	74.2%	1.4%	2806
Pasto	3.4%	6.6%	13.3%	75.5%	1.3%	4302
Pereira	3.6%	7.9%	14.0%	72.8%	1.7%	4556
Piedecuesta	2.9%	6.1%	15.7%	74.3%	1.0%	1479
Pitalito	4.1%	8.3%	14.0%	72.3%	1.4%	1677
Popayán	3.0%	6.7%	13.4%	74.6%	2.4%	2769
Putumayo	4.1%	9.5%	14.3%	68.9%	3.2%	4103
Quibdó	6.2%	12.8%	17.3%	60.9%	2.8%	1464
Quindío	3.6%	8.3%	16.9%	69.1%	2.1%	2675
Riohacha	5.8%	12.6%	18.0%	61.8%	1.8%	2510
Rionegro	3.5%	6.4%	13.6%	75.4%	1.0%	1163
Risaralda	3.6%	8.8%	15.5%	70.1%	1.9%	2976
Sabaneta	3.0%	6.7%	12.7%	70.1%	7.6%	568
Sahagún	3.8%	8.9%	16.6%	70.2%	0.4%	1250
San Andrés	5.8%	15.7%	19.9%	57.3%	1.2%	483
Santa Marta	4.6%	11.0%	15.6%	66.9%	1.8%	5685
Santander	3.5%	7.0%	14.6%	73.9%	1.0%	8527
Sincelejo	4.6%	9.4%	15.2%	68.3%	2.5%	3151
Soacha	4.1%	6.9%	14.0%	73.8%	1.2%	5303
Sogamoso	3.3%	7.7%	13.9%	71.9%	3.3%	1529

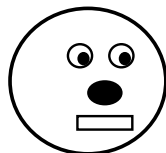
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ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Soledad	4.1%	7.7%	13.5%	73.0%	1.6%	5389
Sucre	5.5%	11.9%	19.2%	61.8%	1.5%	7453
Tolima	4.6%	8.8%	17.0%	67.9%	1.7%	9821
Tuluá	4.2%	8.3%	15.5%	71.0%	1.1%	2187
Tumaco	7.4%	15.7%	18.8%	54.1%	4.1%	2677
Tunja	3.5%	5.3%	13.1%	77.1%	1.0%	1705
Turbo	6.9%	14.3%	19.1%	56.5%	3.2%	1698
Uribe	10.3%	21.9%	20.7%	44.2%	2.9%	987
Valle del Cauca	4.2%	8.7%	14.9%	70.3%	1.9%	9044
Valledupar	4.6%	8.8%	15.5%	66.9%	4.3%	5252
Vaupés	5.5%	21.0%	15.5%	56.3%	1.7%	238
Vichada	3.4%	13.4%	18.5%	63.2%	1.4%	351
Villavicencio	3.5%	7.5%	13.7%	74.1%	1.2%	5502
Yopal	2.5%	7.9%	14.3%	74.3%	1.0%	1833
Zipaquirá	3.2%	6.0%	14.9%	75.6%	0.4%	1373
Colombia	4.3%	8.9%	15.1%	69.7%	2.0%	484612

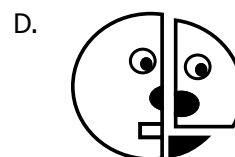
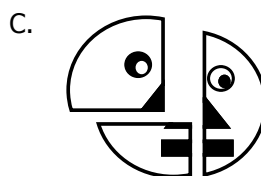
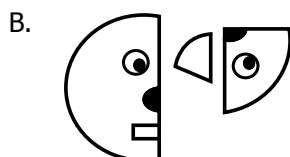
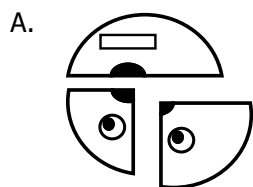
\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

### • Pregunta 3.

En un papel, Sergio dibujó esta cara.



Él recortó la silueta de la cara y después la dividió en tres piezas distintas. ¿Cuáles son las tres piezas que recortó Sergio?



### • Estructura

<b>Competencia</b>	Razonamiento
<b>Componente</b>	Espacial - métrico
<b>Afirmación</b>	Construir y descomponer figuras planas y sólidos a partir de condiciones dadas.
<b>Nivel de desempeño</b>	A
<b>Respuesta Correcta</b>	Mínimo

### • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	74.0%	8.4%	8.8%	7.4%	1.5%	857
Antioquia	80.3%	5.0%	7.3%	4.4%	3.0%	27707
Apartadó	81.4%	6.7%	6.8%	4.4%	0.7%	1680
Arauca	82.9%	4.2%	7.4%	3.6%	1.9%	2693
Armenia	87.5%	4.6%	4.0%	3.0%	0.9%	2699
Atlántico	78.8%	6.2%	8.0%	5.3%	1.7%	5754
Barrancabermeja	84.8%	5.4%	5.3%	3.9%	0.5%	2577
Barranquilla	85.8%	4.5%	5.2%	3.3%	1.2%	11975

Continúa en la siguiente página

## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Bello	87.4%	3.8%	4.5%	3.0%	1.3%	3913
Bogotá, D.C.	90.8%	2.9%	3.3%	2.2%	0.9%	66042
Bolívar	71.2%	7.5%	11.7%	7.3%	2.3%	10443
Boyacá	83.4%	4.4%	7.9%	3.3%	1.0%	9417
Bucaramanga	90.3%	3.3%	3.6%	1.8%	1.0%	5470
Buenaventura	79.2%	6.2%	7.4%	5.4%	1.8%	3465
Buga	84.2%	5.3%	4.2%	4.1%	2.3%	1155
Caldas	84.8%	4.5%	5.6%	3.7%	1.4%	5757
Cali	86.4%	4.1%	4.4%	3.1%	2.0%	18791
Caquetá	77.9%	5.4%	8.9%	5.4%	2.4%	3275
Cartagena	82.8%	5.3%	6.3%	4.0%	1.5%	10845
Cartago	85.9%	4.2%	4.4%	2.9%	2.7%	1125
Casanare	81.8%	4.2%	7.7%	4.2%	2.1%	2969
Cauca	77.1%	5.6%	7.9%	5.8%	3.6%	12305
Cesar	78.2%	5.9%	8.9%	5.3%	1.7%	8248
Chocó	65.8%	7.8%	11.2%	11.0%	4.2%	3825
Chía	91.9%	2.3%	3.4%	2.3%	0.2%	1326
Ciénaga	77.3%	7.1%	7.8%	5.1%	2.8%	1361
Cundinamarca	87.0%	3.4%	4.8%	3.0%	1.7%	16079
Córdoba	73.1%	7.2%	11.2%	6.7%	1.8%	13337
Cúcuta	87.0%	3.9%	5.7%	3.0%	0.4%	7496
Dosquebradas	90.6%	3.0%	3.0%	2.6%	0.8%	1718
Duitama	89.8%	4.1%	3.8%	2.0%	0.3%	1259
Envigado	90.5%	3.3%	4.0%	1.9%	0.2%	1435
Facatativá	89.4%	3.1%	3.4%	3.4%	0.7%	1342
Florencia	84.8%	4.8%	6.4%	3.5%	0.6%	1996
Floridablanca	89.4%	3.8%	3.9%	2.6%	0.4%	2565
Fusagasugá	89.4%	2.9%	4.4%	2.8%	0.5%	1396
Girardot	82.0%	5.6%	5.4%	6.0%	1.1%	990
Girón	86.8%	3.7%	5.8%	2.1%	1.6%	1355
Guainía	70.8%	5.6%	12.1%	8.1%	3.4%	504
Guaviare	73.7%	6.5%	11.1%	6.0%	2.8%	821
Huila	84.8%	3.7%	6.6%	3.6%	1.2%	8363
Ibagué	88.2%	4.0%	3.9%	2.9%	1.0%	5169
Ipiales	87.9%	4.7%	3.9%	2.6%	0.8%	1298
Itagüí	83.0%	5.5%	6.6%	4.0%	0.8%	1820
Jamundí	84.1%	5.4%	5.6%	4.6%	0.4%	1113
La Guajira	74.9%	6.7%	9.3%	6.7%	2.4%	3445
Lorica	72.4%	7.4%	11.0%	7.4%	1.8%	1487
Magangué	75.6%	5.7%	9.0%	6.6%	3.2%	1440

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Magdalena	71.6%	7.6%	10.5%	7.5%	2.8%	8792
Maicao	75.4%	7.7%	9.7%	5.9%	1.3%	2063
Malambo	84.8%	3.9%	5.9%	4.6%	0.8%	1323
Manizales	90.1%	3.1%	3.4%	2.8%	0.7%	3033
Medellín	83.7%	5.2%	6.0%	3.8%	1.3%	20127
Meta	82.3%	4.5%	7.0%	4.1%	2.2%	5660
Montería	80.7%	5.8%	7.1%	5.2%	1.2%	5224
Mosquera	92.0%	3.0%	3.5%	1.3%	0.3%	1180
Nariño	83.7%	4.1%	6.3%	4.4%	1.6%	9260
Neiva	85.6%	4.2%	5.5%	3.9%	0.8%	3792
Norte de Santander	82.8%	4.4%	7.3%	4.2%	1.3%	7570
Palmira	87.6%	3.8%	4.8%	2.7%	1.1%	2806
Pasto	89.7%	3.3%	4.0%	2.3%	0.7%	4302
Pereira	89.0%	3.4%	3.7%	2.9%	1.0%	4556
Piedecuesta	89.6%	2.8%	5.1%	2.2%	0.3%	1479
Pitalito	86.5%	4.2%	5.6%	2.7%	1.0%	1677
Popayán	88.7%	3.6%	4.2%	2.2%	1.3%	2769
Putumayo	79.8%	5.4%	7.6%	4.6%	2.7%	4103
Quibdó	74.8%	6.8%	8.5%	7.2%	2.7%	1464
Quindío	84.3%	4.9%	5.2%	4.4%	1.3%	2675
Riohacha	75.9%	6.7%	8.5%	7.3%	1.6%	2510
Rionegro	89.5%	3.7%	4.4%	2.0%	0.4%	1163
Risaralda	83.9%	4.0%	6.2%	4.2%	1.6%	2976
Sabaneta	83.3%	4.2%	3.3%	1.9%	7.2%	568
Sahagún	79.4%	6.6%	8.5%	5.1%	0.5%	1250
San Andrés	75.6%	8.1%	8.9%	6.0%	1.4%	483
Santa Marta	83.2%	5.4%	5.9%	4.0%	1.5%	5685
Santander	84.8%	4.1%	6.9%	3.4%	0.9%	8527
Sincelejo	82.0%	4.3%	6.9%	4.6%	2.3%	3151
Soacha	89.0%	3.7%	4.0%	2.7%	0.7%	5303
Sogamoso	85.7%	4.0%	4.8%	2.3%	3.2%	1529
Soledad	86.7%	4.3%	4.7%	3.6%	0.7%	5389
Sucre	72.3%	7.6%	11.2%	7.6%	1.4%	7453
Tolima	80.8%	4.6%	8.2%	4.9%	1.4%	9821
Tuluá	87.3%	4.4%	4.3%	3.4%	0.6%	2187
Tumaco	68.6%	8.3%	11.5%	8.3%	3.3%	2677
Tunja	90.8%	2.2%	3.8%	2.5%	0.7%	1705
Turbo	71.9%	7.2%	9.8%	7.7%	3.4%	1698
Uribe	57.2%	10.7%	19.4%	10.4%	2.2%	987
Valle del Cauca	85.3%	4.2%	5.2%	3.8%	1.5%	9044

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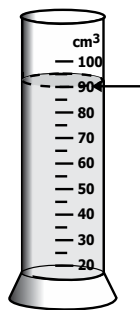
ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Valledupar	81.0%	4.8%	6.2%	4.2%	3.9%	5252
Vaupés	64.3%	10.1%	14.7%	9.2%	1.7%	238
Vichada	82.3%	5.4%	7.4%	4.3%	0.6%	351
Villavicencio	86.8%	4.1%	5.0%	3.2%	0.9%	5502
Yopal	87.1%	4.8%	4.9%	2.3%	0.9%	1833
Zipaquirá	89.6%	3.8%	4.2%	2.3%	0.1%	1373
Colombia	83.5%	4.7%	6.3%	4.0%	1.6%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.



• **Pregunta 4.**

Paula vertió líquido en un recipiente como se muestra en la figura.



**Figura**

Paula anotó el número señalado. Ella midió

- A. la altura del recipiente.
- B. el volumen del líquido.
- C. la resistencia del recipiente.
- D. la temperatura del líquido.

• **Estructura**

<b>Competencia</b>	Comunicación
<b>Componente</b>	Espacial - métrico
<b>Afirmación</b>	Establecer relaciones entre los atributos mensurables de un objeto o evento y sus respectivas magnitudes.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	B

• **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	23.2%	36.6%	11.0%	27.3%	1.9%	857
Antioquia	23.3%	46.8%	6.3%	20.4%	3.2%	27707
Apartadó	23.6%	43.0%	8.8%	23.4%	1.1%	1680
Arauca	25.2%	44.9%	6.4%	21.7%	1.8%	2693
Armenia	28.9%	46.2%	5.4%	18.4%	1.0%	2699
Atlántico	23.2%	46.1%	9.2%	19.4%	2.0%	5754
Barrancabermeja	30.0%	45.2%	7.8%	16.2%	0.8%	2577

Continúa en la siguiente página

## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Barranquilla	27.5%	49.3%	6.6%	15.3%	1.2%	11975
Bello	28.1%	49.8%	5.0%	15.6%	1.5%	3913
Bogotá, D.C.	28.2%	52.7%	4.2%	13.8%	1.0%	66042
Bolívar	23.6%	39.1%	11.5%	23.2%	2.7%	10443
Boyacá	22.7%	52.1%	5.1%	19.0%	1.2%	9417
Bucaramanga	29.9%	49.3%	4.5%	15.3%	1.1%	5470
Buenaventura	21.2%	41.6%	7.1%	27.7%	2.3%	3465
Buga	24.8%	49.1%	6.8%	16.8%	2.5%	1155
Caldas	22.5%	45.1%	6.2%	24.9%	1.3%	5757
Cali	25.6%	48.9%	5.1%	18.3%	2.1%	18791
Caquetá	21.4%	44.5%	7.5%	23.9%	2.6%	3275
Cartagena	24.5%	47.8%	8.0%	17.9%	1.8%	10845
Cartago	26.1%	46.0%	5.4%	20.1%	2.3%	1125
Casanare	25.6%	42.9%	6.7%	22.6%	2.2%	2969
Cauca	21.3%	44.3%	7.1%	23.5%	3.8%	12305
Cesar	22.0%	47.4%	9.2%	19.6%	1.8%	8248
Chocó	22.0%	35.2%	10.8%	27.4%	4.5%	3825
Chía	31.1%	52.3%	3.4%	13.0%	0.2%	1326
Ciénaga	19.7%	45.8%	10.2%	21.6%	2.6%	1361
Cundinamarca	24.1%	50.6%	5.0%	18.4%	1.9%	16079
Córdoba	23.6%	43.5%	10.2%	20.9%	1.9%	13337
Cúcuta	29.6%	46.0%	5.7%	18.1%	0.5%	7496
Dosquebradas	25.0%	51.0%	4.8%	18.4%	0.8%	1718
Duitama	24.4%	62.0%	3.9%	9.1%	0.6%	1259
Envigado	25.2%	63.3%	3.6%	7.7%	0.2%	1435
Facatativá	26.8%	51.0%	4.9%	16.6%	0.6%	1342
Florencia	25.2%	44.2%	8.5%	21.6%	0.6%	1996
Floridablanca	28.8%	53.1%	4.0%	13.5%	0.6%	2565
Fusagasugá	28.9%	48.4%	4.8%	17.2%	0.7%	1396
Girardot	23.6%	44.5%	8.7%	22.2%	0.9%	990
Girón	29.1%	44.0%	4.9%	20.2%	1.8%	1355
Guainía	15.7%	46.6%	6.0%	27.8%	4.0%	504
Guaviare	24.2%	39.8%	10.2%	23.0%	2.7%	821
Huila	22.2%	47.5%	6.0%	23.0%	1.3%	8363
Ibagué	27.4%	47.8%	5.3%	18.3%	1.2%	5169
Ipiales	23.4%	56.8%	5.2%	13.9%	0.7%	1298
Itagüí	28.7%	50.9%	7.7%	11.5%	1.2%	1820
Jamundí	23.7%	45.3%	6.6%	23.7%	0.6%	1113
La Guajira	22.9%	45.2%	9.8%	19.7%	2.4%	3445
Lorica	21.7%	46.7%	9.9%	19.3%	2.4%	1487

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ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Magangué	25.2%	40.9%	9.3%	20.9%	3.7%	1440
Magdalena	22.9%	41.3%	10.3%	22.3%	3.1%	8792
Maicao	24.6%	43.4%	9.9%	20.7%	1.4%	2063
Malambo	22.5%	51.8%	7.4%	16.6%	1.7%	1323
Manizales	24.8%	53.4%	4.5%	16.5%	0.8%	3033
Medellín	27.5%	46.5%	7.1%	17.3%	1.5%	20127
Meta	24.5%	43.8%	6.3%	23.3%	2.2%	5660
Montería	26.8%	48.2%	8.3%	15.4%	1.3%	5224
Mosquera	31.7%	50.1%	3.6%	14.3%	0.3%	1180
Nariño	21.7%	49.7%	5.3%	21.5%	1.7%	9260
Neiva	28.0%	48.3%	5.9%	16.9%	1.0%	3792
Norte de Santander	25.1%	47.7%	6.3%	19.4%	1.4%	7570
Palmira	24.3%	51.7%	5.6%	17.3%	1.2%	2806
Pasto	24.9%	51.0%	4.8%	18.3%	1.0%	4302
Pereira	25.8%	50.0%	4.6%	18.6%	1.0%	4556
Piedecuesta	29.3%	45.9%	6.6%	17.6%	0.6%	1479
Pitalito	25.9%	47.5%	5.8%	19.4%	1.3%	1677
Popayán	24.2%	52.4%	4.5%	17.5%	1.4%	2769
Putumayo	23.1%	44.7%	6.6%	22.7%	2.9%	4103
Quibdó	25.1%	38.2%	10.1%	23.5%	3.1%	1464
Quindío	23.7%	44.6%	6.7%	23.6%	1.4%	2675
Riohacha	24.7%	45.5%	8.3%	20.0%	1.5%	2510
Rionegro	27.5%	52.5%	4.7%	14.8%	0.5%	1163
Risaralda	24.3%	45.0%	6.0%	23.1%	1.6%	2976
Sabaneta	24.8%	50.5%	5.5%	11.8%	7.4%	568
Sahagún	23.4%	52.6%	7.4%	16.0%	0.7%	1250
San Andrés	26.1%	41.2%	9.3%	22.4%	1.0%	483
Santa Marta	26.4%	46.5%	7.7%	17.7%	1.7%	5685
Santander	24.5%	50.2%	5.7%	18.7%	0.9%	8527
Sincelejo	25.5%	48.6%	7.9%	15.4%	2.6%	3151
Soacha	30.5%	45.3%	5.1%	18.2%	1.0%	5303
Sogamoso	27.7%	53.3%	4.6%	11.1%	3.3%	1529
Soledad	26.3%	51.6%	6.4%	14.6%	1.0%	5389
Sucre	23.8%	43.5%	10.4%	20.8%	1.6%	7453
Tolima	23.9%	44.0%	7.3%	23.1%	1.7%	9821
Tuluá	28.0%	45.2%	5.6%	20.6%	0.6%	2187
Tumaco	19.5%	31.6%	11.6%	33.4%	4.0%	2677
Tunja	26.2%	57.2%	4.3%	11.4%	0.8%	1705
Turbo	25.3%	30.9%	11.7%	28.4%	3.7%	1698

Continúa en la siguiente página

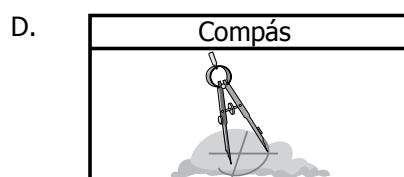
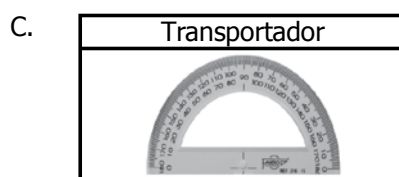
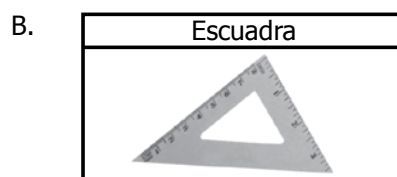
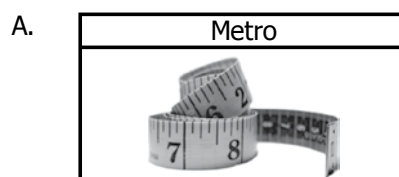
ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Uribe	22.0%	36.4%	12.1%	26.4%	3.1%	987
Valle del Cauca	24.0%	45.3%	6.3%	22.8%	1.7%	9044
Valledupar	24.9%	48.6%	6.5%	15.9%	4.1%	5252
Vaupés	19.7%	37.0%	10.1%	31.1%	2.1%	238
Vichada	26.5%	37.3%	7.1%	27.9%	1.1%	351
Villavicencio	28.4%	47.6%	4.9%	18.1%	1.0%	5502
Yopal	27.8%	45.4%	5.3%	20.7%	0.8%	1833
Zipaquirá	24.0%	58.2%	4.2%	13.5%	0.1%	1373
Colombia	25.3%	47.6%	6.5%	18.8%	1.7%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

### • **Pregunta 5.**

Pedro va a cambiar el piso de su habitación y para ello necesita determinar sus medidas.

¿Cuál de los siguientes instrumentos es el más adecuado?



### • **Estructura**

<b>Competencia</b>	Comunicación
<b>Componente</b>	Espacial - métrico
<b>Afirmación</b>	Establecer relaciones entre los atributos mensurables de un objeto o evento y sus respectivas magnitudes.
<b>Nivel de desempeño</b>	Mínimo
<b>Respuesta Correcta</b>	A

### • **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	78.2%	6.8%	7.6%	6.1%	1.4%	857
Antioquia	86.2%	3.9%	4.2%	2.6%	3.1%	27707
Apartadó	84.2%	5.3%	6.2%	3.6%	0.7%	1680
Arauca	86.7%	4.3%	4.2%	2.9%	1.9%	2693
Armenia	89.1%	3.7%	3.7%	2.4%	1.1%	2699
Atlántico	81.6%	5.6%	6.2%	4.5%	2.1%	5754
Barrancabermeja	87.4%	4.3%	4.2%	3.6%	0.5%	2577
Barranquilla	89.0%	3.7%	3.6%	2.5%	1.2%	11975

Continúa en la siguiente página

## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Bello	90.3%	2.5%	3.2%	2.4%	1.7%	3913
Bogotá, D.C.	93.3%	2.4%	2.1%	1.2%	1.0%	66042
Bolívar	76.3%	7.0%	8.3%	5.5%	2.9%	10443
Boyacá	91.5%	2.5%	2.9%	1.8%	1.3%	9417
Bucaramanga	92.6%	3.0%	2.2%	1.1%	1.0%	5470
Buenaventura	83.8%	4.8%	5.3%	3.9%	2.1%	3465
Buga	88.3%	3.2%	3.2%	2.4%	2.9%	1155
Caldas	89.5%	3.8%	3.0%	2.2%	1.4%	5757
Cali	88.9%	3.6%	3.4%	2.1%	2.0%	18791
Caquetá	83.7%	5.7%	5.2%	3.0%	2.4%	3275
Cartagena	84.9%	4.7%	5.0%	3.8%	1.7%	10845
Cartago	84.5%	5.3%	4.4%	3.2%	2.5%	1125
Casanare	88.0%	3.7%	3.8%	2.0%	2.5%	2969
Cauca	84.3%	4.8%	4.6%	2.6%	3.7%	12305
Cesar	82.6%	5.3%	6.0%	4.2%	1.8%	8248
Chocó	72.1%	8.7%	8.9%	6.2%	4.2%	3825
Chía	94.6%	2.6%	1.4%	1.1%	0.5%	1326
Ciénaga	82.8%	5.1%	5.7%	3.5%	2.9%	1361
Cundinamarca	91.3%	2.8%	2.6%	1.5%	1.8%	16079
Córdoba	81.4%	5.7%	6.6%	4.5%	1.9%	13337
Cúcuta	91.3%	3.4%	2.9%	1.8%	0.5%	7496
Dosquebradas	93.3%	2.9%	1.6%	1.7%	0.6%	1718
Duitama	95.2%	1.8%	1.8%	0.6%	0.5%	1259
Envigado	93.9%	2.2%	2.4%	1.4%	0.1%	1435
Facatativá	94.2%	1.9%	2.5%	1.0%	0.4%	1342
Florencia	86.5%	5.6%	4.1%	3.0%	0.8%	1996
Floridablanca	93.8%	2.7%	1.7%	1.1%	0.6%	2565
Fusagasugá	92.8%	3.2%	2.7%	0.9%	0.5%	1396
Girardot	85.7%	4.9%	5.1%	3.2%	1.1%	990
Girón	90.3%	3.0%	3.0%	2.1%	1.5%	1355
Guainía	80.4%	6.0%	6.3%	3.4%	4.0%	504
Guaviare	79.9%	6.1%	5.1%	5.8%	3.0%	821
Huila	91.1%	2.9%	2.8%	1.9%	1.3%	8363
Ibagué	90.4%	3.5%	3.0%	2.0%	1.2%	5169
Ipiales	92.1%	2.5%	3.0%	1.7%	0.7%	1298
Itagüí	85.2%	5.4%	5.5%	2.8%	1.1%	1820
Jamundí	85.6%	4.1%	6.3%	3.1%	0.9%	1113
La Guajira	78.3%	6.5%	7.4%	5.5%	2.3%	3445
Lorica	78.1%	6.7%	7.5%	5.2%	2.4%	1487
Magangué	82.2%	4.9%	5.1%	4.4%	3.5%	1440

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Magdalena	78.0%	6.5%	7.3%	5.1%	3.1%	8792
Maicao	79.9%	6.5%	7.2%	4.8%	1.6%	2063
Malambo	87.9%	4.2%	4.5%	2.1%	1.3%	1323
Manizales	92.3%	3.0%	2.6%	1.5%	0.6%	3033
Medellín	85.0%	5.3%	4.9%	3.3%	1.6%	20127
Meta	87.9%	3.9%	3.7%	2.3%	2.2%	5660
Montería	84.4%	5.3%	5.6%	3.5%	1.2%	5224
Mosquera	92.6%	2.5%	2.6%	1.9%	0.4%	1180
Nariño	89.9%	3.0%	3.4%	2.1%	1.6%	9260
Neiva	90.6%	3.5%	3.0%	2.0%	0.9%	3792
Norte de Santander	90.4%	3.2%	2.9%	2.2%	1.3%	7570
Palmira	90.6%	3.0%	3.3%	1.8%	1.3%	2806
Pasto	92.6%	2.6%	3.0%	1.1%	0.8%	4302
Pereira	92.1%	2.6%	2.4%	1.7%	1.2%	4556
Piedecuesta	89.5%	4.2%	2.7%	3.2%	0.4%	1479
Pitalito	91.1%	3.0%	3.2%	1.7%	1.0%	1677
Popayán	91.2%	3.3%	2.7%	1.3%	1.4%	2769
Putumayo	87.0%	4.0%	3.7%	2.4%	2.9%	4103
Quibdó	78.1%	6.8%	7.2%	5.1%	2.9%	1464
Quindío	88.7%	3.4%	4.3%	2.3%	1.3%	2675
Riohacha	81.0%	4.9%	7.4%	5.1%	1.7%	2510
Rionegro	92.9%	2.7%	2.6%	1.4%	0.5%	1163
Risaralda	89.6%	3.7%	3.2%	1.8%	1.7%	2976
Sabaneta	84.3%	2.6%	3.9%	1.6%	7.6%	568
Sahagún	86.9%	3.9%	5.4%	3.0%	0.8%	1250
San Andrés	75.2%	9.1%	9.1%	5.6%	1.0%	483
Santa Marta	85.8%	4.6%	4.9%	3.2%	1.6%	5685
Santander	91.7%	2.9%	2.8%	1.8%	0.9%	8527
Sincelejo	86.2%	4.6%	4.1%	2.8%	2.3%	3151
Soacha	90.9%	3.1%	3.3%	1.8%	0.9%	5303
Sogamoso	90.8%	2.5%	2.6%	0.9%	3.3%	1529
Soledad	90.3%	3.3%	3.2%	2.4%	0.9%	5389
Sucre	81.7%	5.6%	6.4%	4.6%	1.6%	7453
Tolima	87.6%	4.1%	3.9%	2.7%	1.7%	9821
Tuluá	90.9%	3.6%	2.8%	2.1%	0.7%	2187
Tumaco	72.0%	8.1%	9.9%	6.3%	3.8%	2677
Tunja	92.8%	3.0%	1.7%	1.5%	1.0%	1705
Turbo	73.7%	8.3%	8.2%	6.4%	3.5%	1698
Uribe	64.9%	12.0%	11.9%	7.3%	4.0%	987
Valle del Cauca	88.6%	3.6%	3.8%	2.4%	1.6%	9044

Continúa en la siguiente página

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Valledupar	85.1%	4.0%	3.9%	2.9%	4.1%	5252
Vaupés	81.9%	5.0%	5.9%	4.2%	2.9%	238
Vichada	86.6%	5.4%	3.4%	3.7%	0.9%	351
Villavicencio	91.3%	3.2%	2.9%	1.7%	0.9%	5502
Yopal	90.8%	3.3%	3.1%	1.9%	1.0%	1833
Zipaquirá	95.3%	1.7%	1.7%	0.9%	0.3%	1373
Colombia	87.7%	3.9%	4.0%	2.6%	1.7%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.





### • Pregunta 6.

Marcela, Lucía y Daniela obtuvieron los tres primeros puestos en un concurso de ortografía. Marcela obtuvo 18 puntos, Lucía 23 y Daniela 15. ¿Qué puesto ocupó cada una de ellas?

- A. Primer puesto: Marcela; Segundo puesto: Lucía; Tercer puesto: Daniela.
- B. Primer puesto: Daniela; Segundo puesto: Marcela; Tercer puesto: Lucía.
- C. Primer puesto: Lucía; Segundo puesto: Marcela; Tercer puesto: Daniela.
- D. Primer puesto: Lucía; Segundo puesto: Daniela; Tercer puesto: Marcela.

### • Estructura

<b>Competencia</b>	Razonamiento
<b>Componente</b>	Numérico - variacional
<b>Afirmación</b>	Reconocer y predecir patrones numéricos.
<b>Nivel de desempeño</b>	Mínimo
<b>Respuesta Correcta</b>	C

### • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	14.6%	15.1%	54.1%	14.7%	1.5%	857
Antioquia	14.9%	17.2%	56.0%	8.8%	3.0%	27707
Apartadó	14.0%	14.4%	60.9%	9.9%	0.8%	1680
Arauca	12.5%	17.2%	60.8%	7.9%	1.6%	2693
Armenia	10.8%	13.6%	67.9%	6.9%	0.9%	2699
Atlántico	14.9%	17.8%	53.3%	12.1%	1.8%	5754
Barrancabermeja	12.3%	15.9%	63.3%	7.9%	0.6%	2577
Barranquilla	12.0%	14.2%	65.0%	7.8%	1.0%	11975
Bello	11.4%	14.6%	66.1%	6.2%	1.6%	3913
Bogotá, D.C.	8.8%	14.4%	70.5%	5.4%	1.0%	66042
Bolívar	18.0%	17.4%	47.9%	14.3%	2.5%	10443
Boyacá	12.0%	17.1%	62.1%	7.7%	1.1%	9417
Bucaramanga	7.9%	14.4%	71.5%	5.2%	1.0%	5470
Buenaventura	17.3%	16.1%	54.3%	10.4%	2.0%	3465
Buga	9.9%	13.8%	67.3%	6.2%	2.9%	1155

Continúa en la siguiente página

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Caldas	12.6%	17.4%	60.9%	7.9%	1.2%	5757
Cali	11.5%	15.4%	64.4%	6.9%	1.9%	18791
Caquetá	17.5%	18.0%	50.6%	11.4%	2.5%	3275
Cartagena	14.2%	14.3%	60.7%	9.1%	1.6%	10845
Cartago	11.6%	15.6%	62.6%	7.6%	2.6%	1125
Casanare	12.1%	17.3%	60.0%	8.3%	2.4%	2969
Cauca	16.6%	17.6%	51.6%	10.5%	3.7%	12305
Cesar	15.1%	17.8%	53.2%	12.1%	1.9%	8248
Chocó	18.7%	17.0%	45.2%	14.8%	4.2%	3825
Chía	7.3%	17.0%	69.6%	5.4%	0.8%	1326
Ciénaga	17.0%	12.9%	55.0%	12.5%	2.7%	1361
Cundinamarca	10.2%	14.5%	66.6%	6.9%	1.7%	16079
Córdoba	17.7%	17.1%	50.2%	13.3%	1.7%	13337
Cúcuta	10.8%	16.2%	65.6%	6.9%	0.5%	7496
Dosquebradas	9.5%	14.7%	69.6%	5.8%	0.5%	1718
Duitama	5.2%	11.6%	78.1%	4.7%	0.4%	1259
Envigado	7.7%	9.2%	77.8%	5.2%	0.1%	1435
Facatativá	10.2%	16.5%	66.5%	6.6%	0.1%	1342
Florencia	14.3%	17.8%	58.2%	9.3%	0.5%	1996
Floridablanca	8.0%	12.1%	74.0%	5.3%	0.5%	2565
Fusagasugá	11.7%	18.0%	64.2%	5.7%	0.4%	1396
Girardot	14.4%	17.4%	56.4%	11.0%	0.8%	990
Girón	11.8%	15.9%	66.1%	4.7%	1.5%	1355
Guainía	16.5%	15.7%	52.4%	12.5%	3.0%	504
Guaviare	15.7%	15.5%	55.7%	10.6%	2.6%	821
Huila	13.9%	18.7%	57.3%	8.9%	1.2%	8363
Ibagué	10.3%	14.9%	66.7%	7.0%	1.2%	5169
Ipiales	10.7%	12.6%	70.0%	6.2%	0.5%	1298
Itagüí	11.9%	17.0%	61.9%	8.1%	1.2%	1820
Jamundí	13.1%	17.3%	59.7%	9.3%	0.4%	1113
La Guajira	17.0%	17.0%	51.1%	12.7%	2.1%	3445
Lorica	18.5%	16.4%	49.2%	14.2%	1.7%	1487
Magangué	16.3%	14.7%	54.4%	11.2%	3.5%	1440
Magdalena	17.6%	17.2%	47.4%	14.9%	3.0%	8792
Maicao	16.9%	19.2%	51.1%	11.6%	1.2%	2063
Malambo	12.1%	18.8%	58.7%	9.3%	1.1%	1323
Manizales	9.9%	13.0%	71.1%	5.4%	0.7%	3033
Medellín	12.1%	14.1%	64.4%	8.0%	1.4%	20127
Meta	12.1%	17.2%	60.2%	8.5%	2.2%	5660
Montería	14.8%	16.1%	57.4%	10.3%	1.4%	5224

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ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Mosquera	7.7%	15.2%	71.6%	5.3%	0.3%	1180
Nariño	12.9%	12.8%	64.0%	8.8%	1.6%	9260
Neiva	10.8%	15.3%	65.3%	7.6%	0.9%	3792
Norte de Santander	13.6%	17.6%	59.4%	8.1%	1.4%	7570
Palmira	10.7%	14.9%	66.0%	7.0%	1.4%	2806
Pasto	9.2%	13.7%	69.3%	7.0%	0.9%	4302
Pereira	10.7%	14.0%	68.2%	6.1%	1.0%	4556
Piedecuesta	9.5%	16.1%	67.3%	6.8%	0.3%	1479
Pitalito	13.1%	17.9%	60.5%	7.4%	1.1%	1677
Popayán	9.7%	15.9%	66.6%	6.6%	1.3%	2769
Putumayo	12.9%	19.0%	56.9%	8.6%	2.6%	4103
Quibdó	16.7%	14.4%	54.3%	11.8%	2.8%	1464
Quindío	14.3%	14.8%	61.3%	8.3%	1.3%	2675
Riohacha	15.8%	20.4%	50.1%	12.0%	1.7%	2510
Rionegro	7.1%	17.5%	69.3%	5.6%	0.4%	1163
Risaralda	12.4%	16.5%	61.2%	8.4%	1.5%	2976
Sabaneta	8.8%	12.7%	63.7%	7.6%	7.2%	568
Sahagún	14.6%	12.5%	62.8%	9.5%	0.6%	1250
San Andrés	13.3%	16.4%	57.6%	11.8%	1.0%	483
Santa Marta	14.8%	16.5%	57.7%	9.4%	1.5%	5685
Santander	12.3%	18.1%	61.6%	7.1%	0.8%	8527
Sincelejo	13.0%	16.4%	60.0%	8.3%	2.2%	3151
Soacha	10.4%	16.4%	65.9%	6.3%	0.9%	5303
Sogamoso	7.0%	15.5%	68.2%	6.0%	3.3%	1529
Soledad	12.1%	16.1%	62.9%	8.1%	0.8%	5389
Sucre	17.1%	17.9%	51.2%	12.5%	1.3%	7453
Tolima	15.6%	18.7%	54.5%	9.7%	1.5%	9821
Tuluá	11.0%	17.2%	63.0%	8.1%	0.7%	2187
Tumaco	17.6%	17.1%	47.8%	13.9%	3.7%	2677
Tunja	8.7%	13.8%	72.0%	4.9%	0.7%	1705
Turbo	20.6%	18.1%	44.4%	13.7%	3.2%	1698
Uribe	23.4%	18.9%	36.2%	18.2%	3.2%	987
Valle del Cauca	13.4%	17.3%	59.8%	8.2%	1.4%	9044
Valledupar	12.7%	14.7%	59.8%	8.9%	4.0%	5252
Vaupés	16.4%	13.4%	53.4%	14.3%	2.5%	238
Vichada	13.1%	18.8%	60.1%	7.7%	0.3%	351
Villavicencio	10.6%	15.7%	67.2%	5.7%	0.8%	5502
Yopal	11.0%	16.6%	65.1%	6.6%	0.7%	1833
Zipaquirá	8.9%	18.3%	67.9%	4.8%	0.1%	1373
Colombia	12.7%	15.9%	61.3%	8.4%	1.6%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 7.**

Víctor, Juliana y Antonio trabajan en una empresa. Víctor lleva 2 años en la empresa, Juliana 11 meses y Antonio 5 años.

Cuando se ordenan, teniendo en cuenta el tiempo que llevan trabajando en la empresa, de mayor a menor, se obtiene:

- A. Víctor - Juliana - Antonio.
- B. Víctor - Antonio - Juliana.
- C. Juliana - Antonio - Víctor.
- D. Antonio - Víctor - Juliana.

• **Estructura**

<b>Competencia</b>	Razonamiento
<b>Componente</b>	Numérico - variacional
<b>Afirmación</b>	Reconocer y predecir patrones numéricos.
<b>Nivel de desempeño</b>	Mínimo
<b>Respuesta Correcta</b>	D

• **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	17.2%	12.4%	19.5%	49.8%	1.2%	857
Antioquia	14.3%	7.9%	12.2%	62.9%	2.8%	27707
Apartadó	15.8%	8.9%	12.9%	62.1%	0.4%	1680
Arauca	12.5%	7.9%	13.9%	64.1%	1.6%	2693
Armenia	10.2%	6.7%	13.2%	69.0%	0.9%	2699
Atlántico	17.2%	10.2%	16.3%	54.9%	1.4%	5754
Barrancabermeja	12.9%	7.9%	14.2%	64.7%	0.2%	2577
Barranquilla	11.3%	7.6%	14.2%	66.0%	0.9%	11975
Bello	9.5%	6.3%	10.6%	72.3%	1.3%	3913
Bogotá, D.C.	6.8%	6.0%	12.2%	74.2%	0.8%	66042
Bolívar	22.3%	11.3%	17.2%	47.0%	2.3%	10443
Boyacá	11.1%	7.5%	13.8%	66.6%	1.0%	9417
Bucaramanga	6.7%	5.6%	12.6%	74.2%	1.0%	5470
Buenaventura	18.0%	7.5%	14.3%	58.5%	1.8%	3465
Buga	10.8%	6.8%	12.6%	67.3%	2.4%	1155

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Caldas	12.6%	7.0%	14.1%	65.2%	1.1%	5757
Cali	9.8%	7.3%	12.5%	68.5%	1.8%	18791
Caquetá	18.0%	8.7%	13.5%	57.7%	2.1%	3275
Cartagena	15.6%	8.2%	14.8%	60.0%	1.4%	10845
Cartago	12.6%	8.6%	10.8%	65.8%	2.2%	1125
Casanare	11.9%	8.9%	13.1%	63.9%	2.2%	2969
Cauca	15.9%	9.0%	14.5%	57.2%	3.3%	12305
Cesar	18.7%	10.0%	13.4%	56.6%	1.4%	8248
Chocó	23.9%	10.2%	15.1%	47.5%	3.3%	3825
Chía	5.7%	6.2%	11.1%	76.9%	0.2%	1326
Ciénaga	18.7%	10.7%	14.0%	54.8%	1.8%	1361
Cundinamarca	8.4%	6.8%	14.0%	69.2%	1.6%	16079
Córdoba	21.1%	10.5%	15.9%	51.1%	1.4%	13337
Cúcuta	9.4%	7.1%	13.6%	69.5%	0.3%	7496
Dosquebradas	6.9%	6.1%	13.6%	73.1%	0.3%	1718
Duitama	4.4%	5.3%	11.5%	78.4%	0.4%	1259
Envigado	6.5%	4.3%	9.6%	79.5%	0.1%	1435
Facatativá	7.1%	5.7%	14.5%	72.5%	0.2%	1342
Florencia	12.7%	9.3%	14.5%	63.1%	0.4%	1996
Floridablanca	5.7%	5.4%	11.8%	76.6%	0.5%	2565
Fusagasugá	7.9%	6.4%	14.9%	70.5%	0.3%	1396
Girardot	16.0%	10.0%	14.1%	58.7%	1.2%	990
Girón	8.9%	6.9%	14.5%	68.3%	1.4%	1355
Guainía	19.2%	11.7%	15.7%	50.2%	3.2%	504
Guaviare	14.7%	10.2%	13.3%	59.9%	1.8%	821
Huila	13.1%	7.9%	15.8%	62.3%	1.0%	8363
Ibagué	9.2%	6.6%	12.7%	70.6%	0.9%	5169
Ipiales	8.0%	6.9%	13.6%	70.9%	0.7%	1298
Itagüí	14.1%	8.0%	10.1%	66.9%	0.9%	1820
Jamundí	14.3%	9.2%	13.3%	62.4%	0.8%	1113
La Guajira	19.6%	10.3%	16.6%	51.7%	1.9%	3445
Lorica	20.0%	10.1%	16.7%	51.8%	1.3%	1487
Magangué	17.4%	9.2%	15.9%	54.5%	3.1%	1440
Magdalena	22.4%	10.7%	15.6%	48.8%	2.5%	8792
Maicao	18.5%	10.0%	17.0%	53.5%	1.1%	2063
Malambo	14.2%	6.4%	15.8%	62.7%	0.8%	1323
Manizales	7.3%	6.5%	11.8%	73.9%	0.6%	3033
Medellín	12.7%	7.9%	11.7%	66.5%	1.1%	20127
Meta	11.9%	7.0%	13.7%	65.5%	1.9%	5660
Montería	16.6%	10.2%	16.3%	55.7%	1.1%	5224

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## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Mosquera	6.8%	6.4%	12.4%	74.3%	0.2%	1180
Nariño	11.6%	6.9%	12.3%	67.8%	1.4%	9260
Neiva	10.2%	7.8%	15.3%	66.0%	0.8%	3792
Norte de Santander	12.8%	8.2%	13.5%	64.3%	1.2%	7570
Palmira	9.4%	8.2%	14.6%	66.7%	1.0%	2806
Pasto	7.6%	6.1%	13.9%	71.6%	0.7%	4302
Pereira	7.8%	5.9%	12.7%	72.7%	0.9%	4556
Piedecuesta	9.3%	7.2%	12.1%	71.1%	0.3%	1479
Pitalito	11.9%	8.1%	12.9%	66.5%	0.7%	1677
Popayán	8.5%	6.8%	14.7%	68.9%	1.2%	2769
Putumayo	13.4%	8.6%	14.5%	61.1%	2.5%	4103
Quibdó	19.3%	10.4%	16.3%	51.6%	2.4%	1464
Quindío	12.5%	8.8%	14.4%	63.2%	1.1%	2675
Riohacha	18.3%	11.0%	16.5%	53.1%	1.2%	2510
Rionegro	6.7%	5.2%	11.1%	76.6%	0.3%	1163
Risaralda	12.3%	7.4%	14.1%	65.0%	1.2%	2976
Sabaneta	5.8%	5.5%	10.0%	71.3%	7.4%	568
Sahagún	15.2%	8.2%	15.8%	60.4%	0.3%	1250
San Andrés	19.3%	10.6%	13.5%	55.5%	1.2%	483
Santa Marta	14.8%	8.4%	15.2%	60.5%	1.2%	5685
Santander	11.0%	6.8%	12.7%	68.9%	0.7%	8527
Sincelejo	14.5%	7.8%	15.9%	59.6%	2.2%	3151
Soacha	8.2%	6.4%	15.3%	69.4%	0.8%	5303
Sogamoso	6.7%	6.0%	12.0%	72.1%	3.1%	1529
Soledad	10.9%	7.0%	15.7%	65.9%	0.6%	5389
Sucre	20.6%	10.2%	16.8%	51.4%	1.0%	7453
Tolima	15.2%	8.9%	15.3%	59.3%	1.4%	9821
Tuluá	9.2%	8.1%	13.1%	69.1%	0.5%	2187
Tumaco	22.4%	12.4%	15.7%	46.5%	3.1%	2677
Tunja	7.8%	6.6%	12.6%	72.4%	0.6%	1705
Turbo	23.7%	10.9%	15.1%	47.6%	2.7%	1698
Uribe	26.3%	13.9%	18.6%	38.7%	2.4%	987
Valle del Cauca	12.7%	7.5%	14.5%	63.9%	1.3%	9044
Valledupar	13.8%	7.8%	13.9%	60.7%	3.8%	5252
Vaupés	28.6%	10.9%	13.9%	45.0%	1.7%	238
Vichada	13.1%	6.3%	11.1%	68.4%	1.1%	351
Villavicencio	8.2%	7.3%	13.0%	70.9%	0.5%	5502
Yopal	10.7%	7.2%	12.2%	69.1%	0.7%	1833
Zipaquirá	6.1%	6.0%	13.2%	74.7%	0.1%	1373
Colombia	12.5%	7.8%	13.7%	64.5%	1.4%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

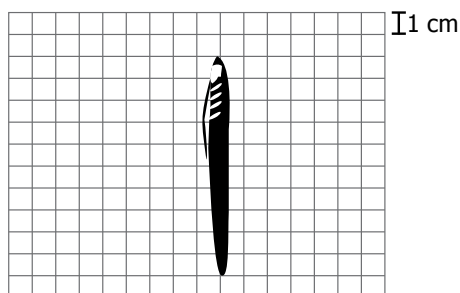


### • Pregunta 8.

En la cuadrícula se dibujó un esfero.

¿Cuál es la longitud de este esfero?

- A. 1 cm.
- B. 9 cm.
- C. 10 cm.
- D. 13 cm.



### • Estructura

<b>Competencia</b>	Comunicación
<b>Componente</b>	Númerico - variacional
<b>Afirmación</b>	Reconocer e interpretar números naturales y fracciones en diferentes contextos.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	C

### • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	28.9%	15.1%	45.6%	8.9%	1.5%	857
Antioquia	33.3%	10.7%	47.1%	5.9%	3.0%	27707
Apartadó	35.5%	11.2%	46.1%	6.1%	1.0%	1680
Arauca	29.1%	10.8%	54.0%	4.4%	1.7%	2693
Armenia	26.5%	9.7%	57.2%	5.5%	1.1%	2699
Atlántico	31.4%	12.8%	45.6%	8.4%	1.7%	5754
Barrancabermeja	30.1%	12.5%	50.6%	6.1%	0.7%	2577
Barranquilla	31.3%	10.9%	50.5%	6.2%	1.1%	11975
Bello	31.3%	10.4%	51.5%	5.3%	1.5%	3913
Bogotá, D.C.	19.5%	10.1%	64.8%	4.6%	1.0%	66042
Bolívar	35.5%	13.8%	39.1%	8.9%	2.7%	10443
Boyacá	26.3%	10.5%	57.6%	4.5%	1.1%	9417
Bucaramanga	19.5%	8.4%	65.7%	5.3%	1.0%	5470
Buenaventura	36.9%	9.8%	46.1%	5.2%	2.0%	3465
Buga	26.1%	11.3%	53.7%	6.2%	2.7%	1155

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## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Caldas	30.6%	10.6%	52.6%	4.9%	1.3%	5757
Cali	25.5%	10.4%	55.6%	6.3%	2.1%	18791
Caquetá	31.1%	10.5%	50.0%	5.9%	2.5%	3275
Cartagena	33.9%	11.4%	46.3%	6.7%	1.6%	10845
Cartago	30.4%	12.1%	48.9%	6.0%	2.6%	1125
Casanare	26.4%	11.3%	55.5%	4.6%	2.2%	2969
Cauca	31.0%	9.7%	49.0%	6.8%	3.4%	12305
Cesar	30.7%	13.6%	47.3%	6.7%	1.7%	8248
Chocó	34.4%	13.1%	38.0%	10.5%	3.9%	3825
Chía	18.6%	10.0%	66.2%	4.8%	0.3%	1326
Ciénaga	35.2%	12.8%	42.5%	6.6%	2.9%	1361
Cundinamarca	23.6%	9.6%	60.7%	4.3%	1.7%	16079
Córdoba	36.1%	12.7%	41.6%	7.8%	1.7%	13337
Cúcuta	28.9%	9.7%	55.1%	5.7%	0.5%	7496
Dosquebradas	27.9%	10.5%	55.8%	5.2%	0.6%	1718
Duitama	13.8%	8.3%	73.4%	4.0%	0.5%	1259
Envigado	16.4%	10.4%	68.3%	4.9%	0.1%	1435
Facatativá	21.7%	11.7%	62.1%	4.2%	0.4%	1342
Florencia	30.5%	11.8%	50.7%	6.3%	0.8%	1996
Floridablanca	19.8%	9.0%	66.0%	4.6%	0.5%	2565
Fusagasugá	23.4%	11.1%	60.1%	4.8%	0.6%	1396
Girardot	30.6%	11.6%	50.7%	5.8%	1.3%	990
Girón	24.9%	11.0%	57.7%	4.9%	1.5%	1355
Guainía	28.8%	13.5%	47.8%	6.7%	3.2%	504
Guaviare	29.0%	12.4%	50.5%	5.4%	2.7%	821
Huila	27.9%	9.5%	56.7%	4.7%	1.1%	8363
Ibagué	22.9%	9.4%	61.7%	4.9%	1.1%	5169
Ipiales	20.0%	8.7%	65.0%	5.4%	0.8%	1298
Itagüí	25.2%	13.9%	54.1%	5.6%	1.2%	1820
Jamundí	33.2%	11.1%	49.9%	5.5%	0.4%	1113
La Guajira	32.9%	12.9%	44.2%	8.1%	1.9%	3445
Lorica	34.8%	11.6%	44.5%	7.3%	2.0%	1487
Magangué	35.4%	10.9%	43.4%	7.1%	3.2%	1440
Magdalena	35.7%	13.4%	39.6%	8.6%	2.7%	8792
Maicao	41.0%	12.6%	38.2%	7.0%	1.3%	2063
Malambo	32.2%	10.6%	50.7%	5.5%	1.0%	1323
Manizales	24.9%	9.7%	59.5%	5.1%	0.8%	3033
Medellín	25.9%	13.7%	52.8%	6.3%	1.4%	20127
Meta	27.6%	11.5%	54.2%	4.6%	2.1%	5660
Montería	33.0%	12.3%	46.6%	7.0%	1.1%	5224

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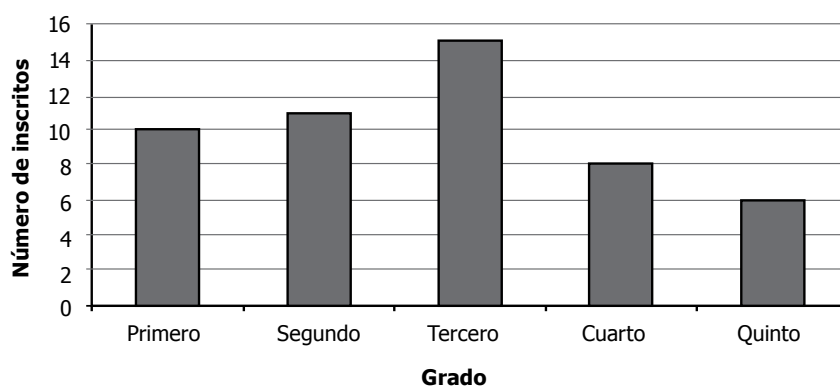


ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Mosquera	21.1%	9.9%	65.2%	3.6%	0.3%	1180
Nariño	27.8%	8.6%	57.0%	5.1%	1.5%	9260
Neiva	25.6%	10.1%	58.0%	5.6%	0.7%	3792
Norte de Santander	30.3%	9.0%	53.8%	5.5%	1.3%	7570
Palmira	22.8%	8.7%	60.2%	7.1%	1.2%	2806
Pasto	21.8%	9.1%	63.0%	5.5%	0.7%	4302
Pereira	26.6%	9.4%	58.0%	5.0%	1.0%	4556
Piedecuesta	22.6%	8.8%	62.5%	5.6%	0.5%	1479
Pitalito	23.9%	10.2%	59.2%	5.5%	1.1%	1677
Popayán	26.3%	10.8%	56.0%	5.3%	1.6%	2769
Putumayo	29.2%	11.0%	51.5%	5.8%	2.6%	4103
Quibdó	36.7%	12.9%	39.7%	8.1%	2.7%	1464
Quindío	29.0%	11.4%	52.8%	5.5%	1.2%	2675
Riohacha	38.7%	11.7%	40.8%	7.4%	1.4%	2510
Rionegro	20.5%	9.7%	63.5%	5.9%	0.4%	1163
Risaralda	31.3%	10.6%	50.8%	6.0%	1.4%	2976
Sabaneta	17.8%	11.4%	59.5%	4.0%	7.2%	568
Sahagún	31.7%	11.8%	49.9%	5.8%	0.8%	1250
San Andrés	32.7%	15.9%	43.1%	7.2%	1.0%	483
Santa Marta	35.3%	13.0%	44.5%	5.7%	1.5%	5685
Santander	27.2%	8.8%	58.4%	4.8%	0.8%	8527
Sincelejo	31.9%	11.3%	47.6%	7.1%	2.1%	3151
Soacha	25.7%	10.3%	58.4%	4.8%	0.8%	5303
Sogamoso	22.0%	10.9%	59.8%	3.9%	3.4%	1529
Soledad	29.5%	10.5%	53.2%	5.8%	1.0%	5389
Sucre	36.1%	12.9%	41.6%	8.0%	1.3%	7453
Tolima	30.1%	10.7%	53.0%	4.8%	1.4%	9821
Tuluá	27.6%	8.5%	56.2%	6.7%	0.9%	2187
Tumaco	36.3%	14.3%	35.6%	9.9%	3.9%	2677
Tunja	18.9%	8.6%	67.8%	3.9%	0.8%	1705
Turbo	39.0%	15.1%	35.2%	7.5%	3.2%	1698
Uribe	30.7%	16.7%	37.4%	12.8%	2.4%	987
Valle del Cauca	29.3%	10.7%	52.6%	5.8%	1.5%	9044
Valledupar	30.2%	10.3%	49.4%	6.1%	4.0%	5252
Vaupés	32.4%	15.5%	38.7%	11.3%	2.1%	238
Vichada	28.5%	13.1%	53.3%	4.6%	0.6%	351
Villavicencio	23.2%	10.2%	61.1%	4.6%	0.9%	5502
Yopal	26.6%	11.8%	56.3%	4.3%	1.0%	1833
Zipaquirá	19.7%	10.5%	65.3%	4.3%	0.3%	1373
Colombia	28.0%	10.9%	53.6%	5.9%	1.6%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 9.**

Algunos estudiantes de primaria de un colegio se inscribieron a una actividad cultural. El número de estudiantes inscritos, por grado, se muestra en la gráfica.



**Gráfica**

¿Cuál de las siguientes afirmaciones sobre los estudiantes inscritos es correcta?

- A. Se inscribieron menos estudiantes de primero que de cualquiera de los otros grados.
- B. Se inscribieron menos estudiantes de segundo que de cuarto.
- C. Se inscribieron más estudiantes de tercero que de cualquiera de los otros grados.
- D. Se inscribieron más estudiantes de quinto que de cuarto.

• **Estructura**

<b>Competencia</b>	Comunicación
<b>Componente</b>	Aleatorio
<b>Afirmación</b>	Describir e Interpretar datos relativos a situaciones del entorno escolar.
<b>Nivel de desempeño</b>	Mínimo
<b>Respuesta Correcta</b>	C



- Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	7.9%	10.5%	67.2%	11.6%	2.8%	857
Antioquia	4.7%	5.9%	78.0%	8.2%	3.1%	27707
Apartadó	5.7%	7.4%	77.3%	8.2%	1.5%	1680
Arauca	4.4%	6.3%	81.4%	6.1%	1.9%	2693
Armenia	4.5%	5.7%	80.1%	8.4%	1.3%	2699
Atlántico	6.7%	7.7%	74.9%	8.8%	1.9%	5754
Barrancabermeja	4.2%	6.8%	81.3%	6.7%	1.0%	2577
Barranquilla	4.4%	6.3%	81.1%	7.1%	1.2%	11975
Bello	4.3%	4.6%	82.5%	7.1%	1.4%	3913
Bogotá, D.C.	3.1%	3.8%	85.7%	6.3%	1.0%	66042
Bolívar	7.7%	10.2%	68.3%	10.9%	2.8%	10443
Boyacá	3.6%	5.0%	84.0%	6.4%	1.0%	9417
Bucaramanga	2.9%	3.7%	86.6%	5.7%	1.1%	5470
Buenaventura	6.3%	7.6%	75.4%	8.5%	2.1%	3465
Buga	4.3%	6.1%	80.0%	6.8%	2.7%	1155
Caldas	4.3%	5.8%	81.5%	7.1%	1.3%	5757
Cali	4.1%	4.9%	82.6%	6.2%	2.0%	18791
Caquetá	5.6%	6.0%	77.8%	8.3%	2.3%	3275
Cartagena	5.7%	7.9%	76.8%	7.8%	1.8%	10845
Cartago	4.8%	6.3%	78.0%	8.0%	2.8%	1125
Casanare	4.9%	6.4%	79.0%	7.7%	2.0%	2969
Cauca	4.8%	6.8%	76.2%	8.5%	3.6%	12305
Cesar	6.5%	9.1%	73.6%	9.0%	1.9%	8248
Chocó	9.5%	11.0%	63.6%	11.3%	4.4%	3825
Chía	2.9%	2.6%	88.3%	5.8%	0.4%	1326
Ciénaga	6.0%	8.8%	72.8%	9.8%	2.6%	1361
Cundinamarca	3.4%	4.4%	85.1%	5.4%	1.7%	16079
Córdoba	6.3%	8.8%	73.5%	9.5%	2.0%	13337
Cúcuta	3.9%	4.9%	83.9%	6.6%	0.6%	7496
Dosquebradas	3.7%	4.5%	83.8%	7.4%	0.6%	1718
Duitama	2.3%	3.7%	89.7%	3.7%	0.6%	1259
Envigado	3.4%	3.2%	88.1%	5.0%	0.3%	1435
Facatativá	3.4%	3.9%	86.6%	5.9%	0.3%	1342
Florencia	4.7%	7.2%	81.0%	6.4%	0.7%	1996
Floridablanca	2.1%	3.5%	87.9%	5.8%	0.7%	2565
Fusagasugá	3.9%	4.7%	83.8%	6.9%	0.7%	1396
Girardot	5.5%	6.7%	77.3%	9.7%	0.9%	990
Girón	4.4%	5.1%	83.4%	5.6%	1.5%	1355

Continúa en la siguiente página

## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Guainía	5.6%	7.7%	72.8%	10.7%	3.2%	504
Guaviare	5.6%	9.4%	71.9%	10.5%	2.7%	821
Huila	3.4%	5.1%	84.0%	6.2%	1.2%	8363
Ibagué	3.3%	4.4%	85.4%	5.8%	1.1%	5169
Ipiales	2.9%	5.1%	86.1%	5.2%	0.8%	1298
Itagüí	5.9%	7.9%	76.2%	8.9%	1.1%	1820
Jamundí	4.7%	6.0%	80.9%	7.6%	0.8%	1113
La Guajira	7.2%	9.2%	70.2%	10.9%	2.5%	3445
Lorica	8.1%	11.3%	67.9%	10.6%	2.2%	1487
Magangué	6.4%	7.8%	74.9%	7.7%	3.2%	1440
Magdalena	7.6%	9.6%	68.6%	11.3%	2.9%	8792
Maicao	6.5%	8.8%	72.0%	10.8%	1.9%	2063
Malambo	5.6%	5.5%	81.8%	6.0%	1.1%	1323
Manizales	3.2%	4.2%	86.4%	5.5%	0.6%	3033
Medellín	5.3%	7.0%	78.9%	7.3%	1.6%	20127
Meta	4.2%	6.1%	80.5%	6.8%	2.4%	5660
Montería	5.8%	7.8%	76.8%	8.2%	1.5%	5224
Mosquera	3.2%	3.5%	86.6%	5.9%	0.8%	1180
Nariño	4.3%	4.4%	82.0%	7.7%	1.5%	9260
Neiva	3.6%	5.0%	85.5%	5.1%	0.8%	3792
Norte de Santander	4.6%	5.4%	82.6%	6.0%	1.4%	7570
Palmira	4.0%	4.5%	85.5%	4.7%	1.2%	2806
Pasto	4.1%	4.3%	85.2%	5.7%	0.7%	4302
Pereira	3.1%	4.3%	84.9%	6.5%	1.1%	4556
Piedecuesta	2.8%	5.3%	85.3%	5.9%	0.7%	1479
Pitalito	4.8%	4.7%	82.6%	7.0%	0.8%	1677
Popayán	3.3%	3.9%	85.2%	6.2%	1.3%	2769
Putumayo	5.1%	6.5%	79.4%	6.2%	2.7%	4103
Quibdó	6.6%	9.0%	72.9%	8.5%	2.9%	1464
Quindío	5.7%	6.9%	78.7%	7.4%	1.3%	2675
Riohacha	6.5%	8.3%	74.2%	9.3%	1.7%	2510
Rionegro	3.1%	3.4%	87.1%	5.8%	0.6%	1163
Risaralda	4.1%	4.6%	82.3%	7.0%	1.9%	2976
Sabaneta	3.7%	3.0%	79.4%	6.5%	7.4%	568
Sahagún	4.4%	5.9%	81.7%	7.2%	0.8%	1250
San Andrés	7.7%	10.6%	69.2%	10.4%	2.3%	483
Santa Marta	5.3%	6.9%	78.1%	8.0%	1.8%	5685
Santander	3.7%	4.4%	85.0%	6.0%	0.9%	8527
Sincelejo	5.4%	6.4%	79.3%	6.5%	2.4%	3151
Soacha	3.7%	3.9%	84.6%	6.8%	1.0%	5303

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Sogamoso	2.7%	4.1%	84.7%	5.0%	3.5%	1529
Soledad	4.5%	4.9%	82.3%	7.2%	1.0%	5389
Sucre	6.7%	8.5%	73.5%	9.6%	1.6%	7453
Tolima	4.7%	6.4%	79.9%	7.3%	1.6%	9821
Tuluá	4.0%	5.0%	85.1%	5.1%	0.7%	2187
Tumaco	9.3%	10.9%	62.6%	13.0%	4.2%	2677
Tunja	2.8%	3.6%	87.3%	5.5%	0.8%	1705
Turbo	9.0%	10.2%	67.0%	10.1%	3.7%	1698
Uribe	8.6%	11.8%	57.4%	19.6%	2.6%	987
Valle del Cauca	4.3%	5.6%	82.2%	6.4%	1.5%	9044
Valledupar	4.1%	5.6%	78.4%	7.8%	4.1%	5252
Vaupés	6.7%	9.7%	68.1%	13.4%	2.1%	238
Vichada	6.6%	4.3%	78.6%	9.4%	1.1%	351
Villavicencio	3.7%	4.1%	85.1%	6.3%	0.8%	5502
Yopal	4.1%	5.0%	82.5%	7.6%	0.7%	1833
Zipaquirá	2.9%	3.7%	87.8%	5.5%	0.1%	1373
Colombia	4.6%	5.9%	80.4%	7.4%	1.7%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 10.**

Mariana está ahorrando para comprar un balón que cuesta \$15.000, la semana pasada tenía \$5.500 y esta semana ahorró \$8.000 más.

¿Cuánto dinero le falta para comprar el balón?

- A. \$1.500
- B. \$5.500
- C. \$8.000
- D. \$15.000

• **Estructura**

<b>Competencia</b>	Resolución
<b>Componente</b>	Numérico - variacional
<b>Afirmación</b>	Resolver problemas aditivos rutinarios y no rutinarios de transformación, comparación, combinación e igualación e interpretar condiciones necesarias para su solución.
<b>Nivel de desempeño</b>	Mínimo
<b>Respuesta Correcta</b>	A

• **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	48.7%	15.8%	15.6%	18.3%	1.6%	857
Antioquia	68.4%	10.1%	9.7%	8.5%	3.2%	27707
Apartadó	64.5%	13.8%	11.8%	9.0%	0.9%	1680
Arauca	69.3%	10.5%	9.8%	8.8%	1.7%	2693
Armenia	72.3%	10.5%	9.5%	6.4%	1.2%	2699
Atlántico	58.6%	13.3%	13.4%	12.8%	1.9%	5754
Barrancabermeja	68.9%	11.1%	11.1%	8.1%	0.9%	2577
Barranquilla	68.5%	11.2%	10.6%	8.3%	1.4%	11975
Bello	73.2%	9.1%	9.3%	6.7%	1.7%	3913
Bogotá, D.C.	76.9%	8.5%	8.3%	5.1%	1.2%	66042
Bolívar	51.0%	14.9%	15.4%	15.7%	3.0%	10443
Boyacá	73.2%	9.1%	9.1%	7.4%	1.3%	9417
Bucaramanga	79.9%	7.1%	6.9%	4.8%	1.3%	5470
Buenaventura	63.0%	11.5%	12.0%	11.2%	2.3%	3465
Buga	70.6%	9.6%	10.6%	6.2%	2.9%	1155
Caldas	72.5%	9.4%	8.6%	8.1%	1.5%	5757

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Cali	71.1%	10.2%	9.8%	6.6%	2.3%	18791
Caquetá	67.8%	10.4%	10.0%	9.3%	2.4%	3275
Cartagena	63.6%	11.8%	12.5%	10.1%	2.0%	10845
Cartago	66.5%	11.7%	10.4%	8.3%	3.1%	1125
Casanare	67.7%	10.4%	9.8%	9.7%	2.5%	2969
Cauca	67.2%	9.0%	9.9%	9.9%	4.0%	12305
Cesar	59.7%	12.7%	12.9%	12.8%	1.9%	8248
Chocó	50.1%	14.1%	13.8%	17.5%	4.6%	3825
Chía	79.3%	8.6%	7.5%	4.3%	0.4%	1326
Ciénaga	59.5%	12.7%	12.9%	12.6%	2.3%	1361
Cundinamarca	75.5%	8.4%	7.9%	6.4%	1.9%	16079
Córdoba	56.0%	14.0%	13.6%	14.3%	2.2%	13337
Cúcuta	75.5%	8.6%	8.8%	6.4%	0.7%	7496
Dosquebradas	77.9%	8.2%	7.9%	4.9%	1.0%	1718
Duitama	81.9%	7.5%	6.9%	3.0%	0.7%	1259
Envigado	80.5%	7.5%	7.0%	4.7%	0.3%	1435
Facatativá	79.3%	8.7%	7.2%	4.4%	0.4%	1342
Florencia	70.4%	9.6%	10.3%	8.5%	1.2%	1996
Floridablanca	80.8%	7.9%	7.0%	3.7%	0.7%	2565
Fusagasugá	74.6%	9.7%	8.9%	6.3%	0.5%	1396
Girardot	64.0%	11.2%	12.7%	10.5%	1.5%	990
Girón	74.1%	9.7%	7.6%	6.5%	2.1%	1355
Guainía	52.6%	13.7%	14.3%	15.9%	3.6%	504
Guaviare	59.3%	13.8%	12.7%	11.9%	2.3%	821
Huila	71.4%	10.0%	8.9%	8.4%	1.3%	8363
Ibagué	74.8%	9.2%	9.0%	5.7%	1.3%	5169
Ipiales	79.0%	7.6%	6.6%	5.5%	1.2%	1298
Itagüí	67.6%	12.5%	11.5%	7.3%	1.2%	1820
Jamundí	66.1%	11.0%	13.1%	8.3%	1.5%	1113
La Guajira	54.2%	13.7%	14.6%	14.9%	2.6%	3445
Lorica	55.3%	14.7%	13.4%	14.3%	2.4%	1487
Magangué	55.3%	13.6%	14.0%	13.5%	3.6%	1440
Magdalena	55.0%	13.6%	13.5%	14.8%	3.0%	8792
Maicao	55.0%	14.6%	13.5%	15.0%	1.9%	2063
Malambo	68.4%	11.4%	9.3%	9.4%	1.4%	1323
Manizales	76.0%	8.9%	8.1%	5.9%	1.1%	3033
Medellín	68.0%	11.6%	10.9%	7.8%	1.7%	20127
Meta	69.3%	9.9%	10.1%	8.3%	2.4%	5660
Montería	60.5%	13.4%	13.1%	11.5%	1.5%	5224
Mosquera	77.9%	8.8%	7.0%	5.7%	0.6%	1180

Continúa en la siguiente página

## GRADO 5° - MATEMÁTICAS

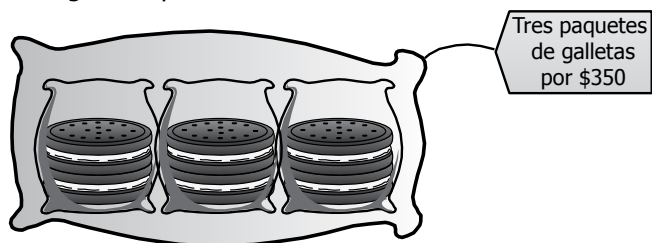
ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Nariño	73.0%	8.5%	8.6%	8.0%	1.9%	9260
Neiva	71.5%	9.6%	10.6%	7.3%	1.0%	3792
Norte de Santander	72.3%	9.3%	8.8%	7.9%	1.8%	7570
Palmira	71.2%	10.1%	9.2%	7.9%	1.6%	2806
Pasto	76.2%	8.7%	8.7%	5.5%	0.9%	4302
Pereira	76.0%	8.9%	8.1%	5.6%	1.4%	4556
Piedecuesta	75.5%	9.1%	8.7%	5.7%	1.0%	1479
Pitalito	73.0%	9.5%	9.7%	7.0%	0.8%	1677
Popayán	75.9%	8.6%	8.5%	5.1%	1.8%	2769
Putumayo	67.0%	9.8%	10.5%	9.8%	2.9%	4103
Quibdó	59.6%	11.4%	12.2%	13.7%	3.2%	1464
Quindío	68.9%	10.9%	9.9%	8.8%	1.6%	2675
Riohacha	58.4%	13.0%	13.2%	13.1%	2.3%	2510
Rionegro	78.6%	8.1%	7.7%	4.9%	0.8%	1163
Risaralda	71.4%	9.3%	9.8%	7.5%	1.9%	2976
Sabaneta	69.9%	9.7%	8.8%	3.9%	7.7%	568
Sahagún	64.1%	12.6%	11.3%	11.0%	1.1%	1250
San Andrés	56.3%	13.7%	15.5%	13.3%	1.2%	483
Santa Marta	64.5%	11.8%	12.4%	9.5%	1.8%	5685
Santander	75.0%	8.6%	7.9%	7.6%	0.9%	8527
Sincelejo	61.4%	12.4%	13.6%	10.2%	2.4%	3151
Soacha	73.6%	9.1%	9.5%	6.6%	1.1%	5303
Sogamoso	76.1%	8.5%	7.3%	4.6%	3.5%	1529
Soledad	70.5%	10.6%	10.5%	7.4%	0.9%	5389
Sucre	55.3%	14.2%	14.3%	14.6%	1.6%	7453
Tolima	68.9%	10.3%	10.1%	8.9%	1.8%	9821
Tuluá	72.8%	9.1%	9.6%	7.3%	1.1%	2187
Tumaco	49.3%	15.5%	13.9%	16.9%	4.3%	2677
Tunja	79.8%	7.1%	7.7%	4.6%	0.9%	1705
Turbo	53.4%	15.2%	14.3%	13.5%	3.7%	1698
Uribe	39.1%	17.8%	17.3%	22.8%	2.9%	987
Valle del Cauca	69.0%	10.9%	9.9%	8.3%	1.9%	9044
Valledupar	64.0%	10.7%	10.8%	10.1%	4.4%	5252
Vaupés	41.6%	16.0%	17.2%	22.7%	2.5%	238
Vichada	65.2%	12.8%	9.7%	11.1%	1.1%	351
Villavicencio	76.4%	8.7%	8.2%	5.7%	1.0%	5502
Yopal	74.9%	10.0%	7.8%	6.3%	1.0%	1833
Zipaquirá	78.6%	8.6%	7.2%	5.2%	0.4%	1373
Colombia	69.1%	10.4%	10.2%	8.5%	1.9%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.



• **Pregunta 11.**

En una tienda se ofrece la siguiente promoción:



¿En cuál de las tablas se muestra correctamente el precio de 3, 6 y 9 paquetes de estas galletas?

A.

Número de paquetes	Costo (\$)
3	350
6	350
9	350

B.

Número de paquetes	Costo (\$)
3	350
6	700
9	1.050

C.

Número de paquetes	Costo (\$)
3	350
6	700
9	1.400

D.

Número de paquetes	Costo (\$)
3	350
6	650
9	900

• **Estructura**

<b>Competencia</b>	Resolución
<b>Componente</b>	Numérico - variacional
<b>Afirmación</b>	Resolver y formular problemas sencillos de proporcionalidad directa e inversa.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	B

## • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	32.3%	32.3%	19.7%	13.5%	2.1%	857
Antioquia	25.6%	42.4%	15.8%	13.0%	3.2%	27707
Apartadó	26.7%	40.3%	17.3%	14.5%	1.3%	1680
Arauca	23.0%	45.5%	17.7%	12.0%	1.8%	2693
Armenia	21.5%	47.5%	15.6%	14.3%	1.1%	2699
Atlántico	25.2%	40.6%	18.0%	14.0%	2.1%	5754
Barrancabermeja	20.7%	47.8%	15.5%	14.8%	1.1%	2577
Barranquilla	24.0%	44.2%	16.4%	14.1%	1.4%	11975
Bello	22.4%	43.2%	17.5%	15.4%	1.5%	3913
Bogotá, D.C.	17.5%	52.2%	15.7%	13.5%	1.1%	66042
Bolívar	29.0%	36.6%	16.6%	14.7%	3.1%	10443
Boyacá	20.2%	51.1%	16.1%	11.5%	1.1%	9417
Bucaramanga	15.7%	56.2%	14.9%	11.9%	1.3%	5470
Buenaventura	28.7%	43.5%	14.1%	11.3%	2.5%	3465
Buga	22.7%	46.7%	13.9%	13.9%	2.9%	1155
Caldas	22.8%	48.3%	14.6%	12.9%	1.5%	5757
Cali	20.8%	46.2%	16.3%	14.5%	2.2%	18791
Caquetá	27.8%	42.9%	15.2%	11.6%	2.5%	3275
Cartagena	23.9%	45.0%	15.5%	13.8%	1.9%	10845
Cartago	19.8%	46.3%	15.9%	15.2%	2.8%	1125
Casanare	25.4%	43.3%	16.5%	12.5%	2.3%	2969
Cauca	24.6%	46.9%	14.1%	10.5%	3.8%	12305
Cesar	25.9%	43.9%	15.0%	13.2%	1.9%	8248
Chocó	29.2%	35.5%	17.0%	13.5%	4.8%	3825
Chía	14.8%	53.1%	17.0%	14.6%	0.5%	1326
Ciénaga	29.5%	40.5%	15.2%	12.2%	2.6%	1361
Cundinamarca	18.5%	51.8%	15.7%	12.1%	1.8%	16079
Córdoba	30.4%	36.9%	16.5%	14.1%	2.1%	13337
Cúcuta	20.4%	49.6%	16.1%	13.3%	0.6%	7496
Dosquebradas	21.1%	49.0%	15.7%	13.3%	0.9%	1718
Duitama	12.1%	58.3%	16.8%	12.2%	0.7%	1259
Envigado	14.8%	53.5%	18.6%	12.8%	0.3%	1435
Facatativá	19.0%	51.7%	16.2%	12.4%	0.6%	1342
Florencia	23.9%	47.5%	14.8%	12.5%	1.2%	1996
Floridablanca	15.1%	55.2%	15.6%	13.5%	0.6%	2565
Fusagasugá	18.1%	53.1%	16.4%	11.6%	0.9%	1396
Girardot	29.1%	41.8%	14.3%	13.2%	1.5%	990
Girón	17.8%	49.2%	18.3%	12.8%	1.9%	1355
Guainía	29.8%	34.9%	14.9%	16.9%	3.6%	504

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Guaviare	32.0%	37.5%	13.5%	14.0%	2.9%	821
Huila	23.5%	48.3%	14.3%	12.7%	1.3%	8363
Ibagué	17.8%	53.2%	14.6%	13.3%	1.1%	5169
Ipiales	20.2%	53.3%	15.2%	10.5%	0.8%	1298
Itagüí	20.5%	43.6%	20.1%	14.4%	1.4%	1820
Jamundí	22.6%	44.9%	16.1%	15.3%	1.1%	1113
La Guajira	25.3%	42.1%	16.5%	13.8%	2.3%	3445
Lorica	26.7%	37.9%	18.2%	15.1%	2.0%	1487
Magangué	28.5%	38.3%	15.1%	14.9%	3.3%	1440
Magdalena	30.6%	38.2%	15.2%	13.0%	3.0%	8792
Maicao	31.9%	35.6%	17.9%	12.7%	1.8%	2063
Malambo	24.7%	48.1%	15.4%	10.3%	1.4%	1323
Manizales	17.0%	53.0%	15.1%	14.0%	0.9%	3033
Medellín	22.8%	42.5%	18.2%	14.9%	1.7%	20127
Meta	23.3%	46.3%	15.6%	12.6%	2.2%	5660
Montería	24.9%	40.3%	18.2%	15.0%	1.6%	5224
Mosquera	16.1%	50.0%	19.3%	14.2%	0.4%	1180
Nariño	25.0%	48.7%	14.0%	10.6%	1.7%	9260
Neiva	22.9%	47.6%	15.7%	12.6%	1.1%	3792
Norte de Santander	22.4%	49.8%	15.4%	10.9%	1.6%	7570
Palmira	19.5%	48.5%	15.7%	14.9%	1.3%	2806
Pasto	17.9%	52.4%	16.5%	12.2%	1.0%	4302
Pereira	20.7%	50.1%	14.6%	13.5%	1.1%	4556
Piedecuesta	19.4%	50.5%	18.3%	11.3%	0.5%	1479
Pitalito	22.0%	50.0%	14.8%	12.1%	1.1%	1677
Popayán	20.4%	50.7%	15.2%	11.8%	1.8%	2769
Putumayo	26.4%	43.5%	15.3%	11.9%	2.8%	4103
Quibdó	27.2%	38.7%	16.1%	14.7%	3.3%	1464
Quindío	22.7%	47.2%	15.3%	13.4%	1.5%	2675
Riohacha	29.4%	39.6%	15.8%	13.2%	2.1%	2510
Rionegro	15.1%	52.6%	17.5%	13.9%	0.9%	1163
Risaralda	22.5%	47.9%	15.4%	12.5%	1.7%	2976
Sabaneta	14.3%	45.4%	17.6%	15.3%	7.4%	568
Sahagún	24.7%	44.9%	17.2%	12.5%	0.7%	1250
San Andrés	26.3%	37.3%	20.1%	14.9%	1.4%	483
Santa Marta	25.6%	42.9%	15.7%	13.9%	1.9%	5685
Santander	18.6%	53.0%	15.6%	11.8%	0.9%	8527
Sincelejo	24.8%	42.4%	15.8%	14.5%	2.4%	3151
Soacha	21.0%	50.5%	13.8%	13.5%	1.2%	5303
Sogamoso	15.8%	54.2%	13.9%	12.8%	3.4%	1529

Continúa en la siguiente página

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Soledad	22.4%	48.6%	15.5%	12.7%	0.9%	5389
Sucre	28.6%	38.8%	16.2%	14.6%	1.7%	7453
Tolima	23.6%	46.7%	15.3%	12.6%	1.8%	9821
Tuluá	20.1%	47.0%	17.1%	14.9%	1.0%	2187
Tumaco	29.1%	34.1%	17.9%	14.9%	4.0%	2677
Tunja	12.8%	58.8%	16.0%	11.6%	0.8%	1705
Turbo	32.8%	31.7%	18.0%	13.8%	3.7%	1698
Uribe	27.1%	35.3%	19.0%	14.4%	4.3%	987
Valle del Cauca	22.7%	46.5%	16.3%	12.8%	1.7%	9044
Valledupar	24.0%	45.2%	14.7%	11.8%	4.2%	5252
Vaupés	34.9%	28.6%	16.8%	17.2%	2.5%	238
Vichada	32.2%	37.0%	14.5%	14.8%	1.4%	351
Villavicencio	19.2%	50.9%	16.8%	11.9%	1.2%	5502
Yopal	20.3%	48.8%	17.0%	12.9%	1.0%	1833
Zipaquirá	15.4%	55.0%	16.2%	13.1%	0.2%	1373
Colombia	22.6%	46.5%	15.9%	13.2%	1.8%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.



### • Pregunta 12.

Un profesor de matemáticas está pasando al tablero a algunos estudiantes.

Él tiene en cuenta el código (número que ocupa el estudiante en la lista), y sigue una secuencia para llamarlos.

Ya han pasado los estudiantes cuyos códigos son 1, 4, 7, 10, 13, en ese orden.

El séptimo estudiante que pasará al tablero tiene el código

- A. 6
- B. 14
- C. 19
- D. 27

### • Estructura

<b>Competencia</b>	Razonamiento
<b>Componente</b>	Numérico - variacional
<b>Afirmación</b>	Reconocer y predecir patrones numéricos
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	C

### • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	13.9%	27.0%	36.4%	21.5%	1.3%	857
Antioquia	11.2%	27.1%	46.7%	11.7%	3.2%	27707
Apartadó	12.9%	27.7%	45.1%	13.3%	1.0%	1680
Arauca	10.8%	23.7%	52.3%	11.1%	2.1%	2693
Armenia	11.0%	27.0%	51.4%	9.4%	1.3%	2699
Atlántico	13.9%	25.4%	43.0%	15.7%	2.0%	5754
Barrancabermeja	11.6%	25.3%	51.5%	10.4%	1.2%	2577
Barranquilla	10.5%	26.5%	51.9%	9.7%	1.3%	11975
Bello	9.8%	28.1%	52.9%	7.6%	1.7%	3913
Bogotá, D.C.	7.8%	23.4%	61.4%	6.0%	1.3%	66042
Bolívar	14.5%	27.0%	35.9%	19.8%	2.8%	10443

Continúa en la siguiente página

## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Boyacá	10.5%	25.5%	52.6%	10.1%	1.2%	9417
Bucaramanga	7.2%	23.0%	62.3%	6.1%	1.5%	5470
Buenaventura	13.0%	25.7%	44.2%	14.6%	2.5%	3465
Buga	10.7%	24.4%	53.9%	8.2%	2.8%	1155
Caldas	10.3%	25.7%	50.6%	11.9%	1.5%	5757
Cali	9.4%	24.9%	54.6%	8.6%	2.6%	18791
Caquetá	12.5%	27.6%	43.7%	13.4%	2.9%	3275
Cartagena	11.6%	24.9%	48.4%	13.1%	2.0%	10845
Cartago	9.7%	25.8%	50.8%	10.9%	2.8%	1125
Casanare	11.5%	26.4%	49.1%	10.7%	2.3%	2969
Cauca	11.5%	26.6%	45.6%	12.3%	4.0%	12305
Cesar	13.0%	25.8%	43.3%	15.9%	2.0%	8248
Chocó	16.1%	27.8%	32.1%	19.8%	4.3%	3825
Chía	8.0%	25.2%	60.5%	5.6%	0.8%	1326
Ciénaga	14.7%	28.0%	41.2%	13.7%	2.4%	1361
Cundinamarca	8.3%	24.3%	57.0%	8.4%	2.0%	16079
Córdoba	13.5%	27.7%	39.5%	17.5%	1.9%	13337
Cúcuta	9.5%	26.1%	55.4%	8.3%	0.7%	7496
Dosquebradas	9.4%	26.7%	56.1%	6.8%	1.0%	1718
Duitama	6.0%	19.9%	69.3%	4.2%	0.6%	1259
Envigado	7.5%	20.4%	65.9%	5.6%	0.6%	1435
Facatativá	9.2%	24.6%	59.5%	6.3%	0.4%	1342
Florencia	11.9%	28.9%	47.5%	10.6%	1.2%	1996
Floridablanca	7.5%	21.8%	64.4%	5.6%	0.7%	2565
Fusagasugá	9.2%	25.5%	55.9%	8.5%	0.9%	1396
Girardot	12.1%	28.4%	45.2%	12.9%	1.4%	990
Girón	8.4%	26.4%	53.7%	9.4%	2.1%	1355
Guainía	14.7%	28.6%	36.5%	15.7%	4.6%	504
Guaviare	12.8%	25.8%	42.9%	15.7%	2.8%	821
Huila	10.2%	28.8%	48.7%	11.0%	1.3%	8363
Ibagué	8.5%	23.8%	58.5%	8.0%	1.3%	5169
Ipiales	9.0%	21.3%	62.0%	6.9%	0.8%	1298
Itagüí	12.0%	26.5%	49.1%	10.8%	1.5%	1820
Jamundí	12.9%	27.8%	46.5%	11.6%	1.2%	1113
La Guajira	13.1%	27.2%	40.5%	16.9%	2.3%	3445
Lorica	11.9%	26.5%	39.6%	20.0%	2.0%	1487
Magangué	13.3%	26.2%	41.9%	15.3%	3.3%	1440
Magdalena	14.9%	26.9%	37.6%	17.7%	3.0%	8792
Maicao	14.4%	28.3%	39.2%	16.4%	1.7%	2063
Malambo	11.0%	23.0%	52.7%	11.9%	1.4%	1323

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Manizales	8.9%	24.9%	59.1%	6.2%	0.9%	3033
Medellín	11.5%	26.9%	49.0%	10.9%	1.7%	20127
Meta	10.5%	27.2%	48.3%	11.3%	2.6%	5660
Montería	12.3%	25.6%	46.5%	14.2%	1.4%	5224
Mosquera	9.2%	24.5%	59.7%	6.0%	0.6%	1180
Nariño	10.3%	25.4%	52.3%	10.2%	1.8%	9260
Neiva	10.4%	27.7%	49.6%	11.0%	1.2%	3792
Norte de Santander	10.6%	25.9%	51.7%	10.2%	1.7%	7570
Palmira	9.4%	22.6%	57.5%	8.9%	1.6%	2806
Pasto	8.3%	25.6%	58.2%	6.8%	1.0%	4302
Pereira	10.0%	24.6%	55.8%	8.3%	1.4%	4556
Piedecuesta	7.8%	24.3%	57.8%	9.3%	0.7%	1479
Pitalito	10.3%	28.3%	50.7%	9.5%	1.2%	1677
Popayán	10.2%	25.6%	54.2%	7.9%	2.1%	2769
Putumayo	10.8%	27.4%	46.3%	12.5%	3.0%	4103
Quibdó	14.6%	27.0%	41.9%	13.3%	3.2%	1464
Quindío	11.8%	27.6%	46.2%	12.9%	1.6%	2675
Riohacha	13.5%	29.2%	41.4%	13.9%	2.0%	2510
Rionegro	8.4%	22.3%	60.8%	7.5%	1.0%	1163
Risaralda	11.6%	26.9%	48.7%	11.0%	1.8%	2976
Sabaneta	6.7%	22.0%	57.9%	5.3%	8.1%	568
Sahagún	10.0%	25.5%	48.6%	14.9%	1.0%	1250
San Andrés	11.2%	27.1%	44.5%	16.4%	0.8%	483
Santa Marta	11.9%	26.2%	47.8%	12.2%	1.9%	5685
Santander	9.8%	24.3%	55.3%	9.5%	1.1%	8527
Sincelejo	11.7%	24.6%	48.7%	12.6%	2.3%	3151
Soacha	10.0%	26.0%	55.3%	7.6%	1.1%	5303
Sogamoso	7.6%	22.8%	58.9%	7.3%	3.5%	1529
Soledad	9.9%	24.1%	55.4%	9.4%	1.2%	5389
Sucre	13.7%	28.1%	40.0%	16.8%	1.4%	7453
Tolima	11.1%	27.2%	47.2%	12.7%	1.8%	9821
Tuluá	8.7%	25.8%	54.8%	10.0%	0.8%	2187
Tumaco	15.4%	27.7%	32.9%	19.7%	4.3%	2677
Tunja	7.5%	22.1%	64.2%	5.1%	1.1%	1705
Turbo	15.5%	29.7%	33.5%	18.2%	3.1%	1698
Uribe	16.6%	26.7%	29.6%	23.8%	3.2%	987
Valle del Cauca	10.4%	25.7%	50.6%	11.4%	1.8%	9044
Valledupar	10.7%	23.8%	50.2%	11.2%	4.2%	5252
Vaupés	14.7%	30.7%	31.9%	20.6%	2.1%	238
Vichada	12.8%	29.6%	41.6%	14.8%	1.1%	351

Continúa en la siguiente página

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Villavicencio	9.8%	24.6%	56.6%	7.9%	1.1%	5502
Yopal	9.5%	26.8%	52.9%	9.6%	1.1%	1833
Zipaquirá	7.9%	20.9%	64.3%	6.4%	0.5%	1373
Colombia	10.6%	25.7%	51.0%	10.8%	1.9%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.





- Pregunta 13.**

Fernando tiene hoy \$25.000. Ayer tenía \$13.000 menos de lo que tiene hoy.

¿Cuánto dinero tenía Fernando ayer?

- A. \$12.000
- B. \$13.000
- C. \$26.000
- D. \$38.000

- Estructura**

<b>Competencia</b>	Resolución
<b>Componente</b>	Númérico - variacional
<b>Afirmación</b>	Resolver problemas aditivos rutinarios y no rutinarios de transformación, comparación, combinación e igualación e interpretar condiciones necesarias para su solución.
<b>Nivel de desempeño</b>	Avanzado
<b>Respuesta Correcta</b>	A

- Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	24.0%	45.7%	7.0%	21.5%	1.8%	857
Antioquia	32.6%	46.3%	4.2%	13.9%	2.9%	27707
Apartadó	31.4%	44.9%	4.7%	18.0%	1.1%	1680
Arauca	35.6%	44.0%	3.9%	14.8%	1.7%	2693
Armenia	38.2%	45.5%	4.3%	10.9%	1.1%	2699
Atlántico	34.6%	39.3%	6.2%	18.5%	1.4%	5754
Barrancabermeja	40.6%	40.5%	4.5%	13.7%	0.6%	2577
Barranquilla	37.5%	44.1%	4.3%	13.2%	1.0%	11975
Bello	36.5%	47.5%	3.5%	11.0%	1.5%	3913
Bogotá, D.C.	45.5%	41.4%	3.3%	8.7%	1.0%	66042
Bolívar	30.2%	38.7%	7.0%	21.9%	2.2%	10443
Boyacá	37.5%	45.2%	3.9%	12.4%	1.0%	9417
Bucaramanga	48.8%	37.6%	3.2%	9.3%	1.1%	5470
Buenaventura	32.9%	43.2%	4.6%	17.1%	2.1%	3465

Continúa en la siguiente página

## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Buga	41.3%	40.9%	4.2%	11.2%	2.5%	1155
Caldas	37.2%	42.7%	4.2%	14.7%	1.3%	5757
Cali	41.1%	41.4%	3.7%	11.8%	1.9%	18791
Caquetá	32.6%	44.6%	5.3%	14.6%	2.7%	3275
Cartagena	38.0%	40.3%	4.9%	15.2%	1.6%	10845
Cartago	37.3%	42.9%	4.0%	13.3%	2.4%	1125
Casanare	35.1%	44.8%	3.9%	14.1%	2.2%	2969
Cauca	35.2%	41.0%	4.8%	15.7%	3.4%	12305
Cesar	36.2%	39.5%	5.6%	17.2%	1.5%	8248
Chocó	30.2%	36.0%	6.9%	22.9%	4.0%	3825
Chía	46.4%	42.8%	2.0%	8.4%	0.4%	1326
Ciénaga	32.0%	40.6%	5.2%	19.5%	2.7%	1361
Cundinamarca	42.8%	40.4%	3.5%	11.6%	1.7%	16079
Córdoba	29.2%	42.5%	6.0%	20.6%	1.7%	13337
Cúcuta	38.5%	43.9%	4.3%	12.9%	0.4%	7496
Dosquebradas	41.7%	45.2%	2.4%	10.4%	0.4%	1718
Duitama	60.0%	29.2%	3.7%	6.8%	0.3%	1259
Envigado	56.8%	32.6%	2.4%	7.8%	0.3%	1435
Facatativá	44.4%	42.1%	2.7%	10.5%	0.3%	1342
Florencia	35.3%	45.1%	4.9%	14.2%	0.5%	1996
Floridablanca	50.8%	37.1%	3.6%	8.1%	0.4%	2565
Fusagasugá	41.0%	43.8%	3.9%	10.9%	0.4%	1396
Girardot	30.1%	49.3%	6.3%	13.2%	1.1%	990
Girón	37.2%	46.1%	4.1%	10.9%	1.7%	1355
Guainía	23.6%	43.7%	6.5%	22.8%	3.4%	504
Guaviare	30.5%	44.1%	6.3%	16.9%	2.2%	821
Huila	34.4%	44.8%	4.1%	15.7%	1.0%	8363
Ibagué	43.4%	41.2%	3.6%	10.9%	0.9%	5169
Ipiales	50.5%	34.2%	3.3%	11.3%	0.6%	1298
Itagüí	38.1%	44.6%	4.7%	11.4%	1.2%	1820
Jamundí	35.8%	44.7%	5.0%	13.9%	0.6%	1113
La Guajira	30.6%	40.2%	7.1%	20.1%	1.9%	3445
Lorica	33.3%	37.8%	6.8%	20.7%	1.4%	1487
Magangué	28.3%	42.6%	6.4%	19.2%	3.5%	1440
Magdalena	31.0%	39.6%	6.6%	20.0%	2.8%	8792
Maicao	27.5%	46.1%	5.9%	19.1%	1.4%	2063
Malambo	39.4%	37.6%	4.1%	18.0%	0.9%	1323
Manizales	44.5%	41.7%	3.4%	9.7%	0.8%	3033
Medellín	38.3%	43.5%	4.9%	11.9%	1.4%	20127
Meta	32.2%	47.2%	4.6%	13.9%	2.1%	5660
Montería	33.5%	42.0%	5.7%	17.9%	1.0%	5224

Continúa en la siguiente página

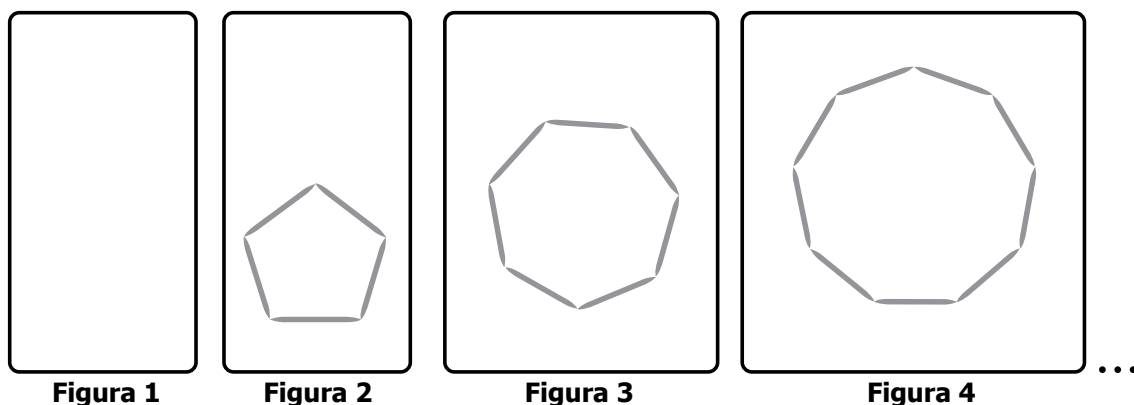


ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Mosquera	42.1%	43.6%	3.0%	11.1%	0.3%	1180
Nariño	37.4%	44.4%	3.5%	13.2%	1.5%	9260
Neiva	37.9%	43.2%	3.9%	14.3%	0.7%	3792
Norte de Santander	38.0%	43.1%	4.0%	13.7%	1.2%	7570
Palmira	42.8%	39.3%	3.4%	13.3%	1.2%	2806
Pasto	44.8%	39.0%	3.6%	11.7%	0.9%	4302
Pereira	38.4%	46.8%	3.4%	10.5%	0.9%	4556
Piedecuesta	44.6%	39.0%	4.3%	11.8%	0.3%	1479
Pitalito	39.1%	43.3%	4.2%	12.7%	0.7%	1677
Popayán	42.3%	41.1%	3.3%	11.9%	1.4%	2769
Putumayo	35.4%	41.1%	4.7%	16.1%	2.6%	4103
Quibdó	35.5%	37.1%	5.4%	19.1%	3.0%	1464
Quindío	31.8%	47.6%	4.9%	14.5%	1.2%	2675
Riohacha	30.8%	44.3%	5.9%	17.5%	1.5%	2510
Rionegro	43.8%	43.1%	2.6%	10.2%	0.3%	1163
Risaralda	34.9%	45.5%	3.8%	14.7%	1.2%	2976
Sabaneta	48.2%	33.8%	3.0%	7.7%	7.2%	568
Sahagún	36.2%	41.0%	5.0%	17.5%	0.3%	1250
San Andrés	35.0%	47.0%	6.4%	10.8%	0.8%	483
Santa Marta	34.1%	45.2%	4.9%	14.4%	1.4%	5685
Santander	43.0%	40.1%	4.0%	12.3%	0.7%	8527
Sincelejo	37.0%	39.8%	5.5%	15.9%	1.8%	3151
Soacha	37.9%	46.8%	3.5%	10.9%	0.9%	5303
Sogamoso	47.2%	36.6%	3.8%	9.3%	3.2%	1529
Soledad	39.7%	42.4%	3.4%	13.9%	0.6%	5389
Sucre	29.1%	41.9%	6.4%	21.3%	1.3%	7453
Tolima	33.7%	44.0%	4.9%	16.0%	1.5%	9821
Tuluá	38.8%	44.0%	3.7%	12.9%	0.6%	2187
Tumaco	27.1%	39.2%	7.5%	21.4%	4.7%	2677
Tunja	51.7%	36.8%	3.1%	7.6%	0.9%	1705
Turbo	21.9%	48.9%	6.7%	19.6%	2.9%	1698
Uribe	21.1%	44.8%	6.9%	22.6%	4.7%	987
Valle del Cauca	35.4%	44.3%	4.2%	14.8%	1.4%	9044
Valledupar	35.2%	39.2%	4.7%	16.8%	4.1%	5252
Vaupés	16.0%	44.1%	6.3%	29.0%	4.6%	238
Vichada	27.6%	52.1%	5.1%	14.2%	0.9%	351
Villavicencio	42.5%	42.1%	3.8%	10.9%	0.8%	5502
Yopal	38.5%	43.6%	3.9%	13.2%	0.8%	1833
Zipaquirá	49.1%	38.5%	2.8%	9.4%	0.2%	1373
Colombia	38.0%	42.3%	4.4%	13.7%	1.6%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 14.**

Observa la siguiente secuencia incompleta de figuras formadas con palillos.



Manteniendo la secuencia, ¿cuántos palillos se necesitan para formar la figura 1?

- A. 1
- B. 3
- C. 5
- D. 7

• **Estructura**

<b>Competencia</b>	Razonamiento
<b>Componente</b>	Numérico - variacional
<b>Afirmación</b>	Reconocer y predecir patrones.
<b>Nivel de desempeño</b>	Mínimo
<b>Respuesta Correcta</b>	B

• **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	12.8%	43.6%	23.7%	17.5%	2.3%	857
Antioquia	10.7%	58.6%	17.7%	9.5%	3.5%	27707
Apartadó	12.6%	56.3%	20.2%	9.8%	1.1%	1680
Arauca	10.1%	64.6%	14.4%	8.7%	2.3%	2693
Armenia	9.2%	65.0%	16.7%	8.1%	1.0%	2699

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Atlántico	11.0%	55.7%	19.8%	11.5%	2.1%	5754
Barrancabermeja	9.2%	64.0%	18.2%	7.3%	1.2%	2577
Barranquilla	9.7%	64.9%	16.5%	7.3%	1.6%	11975
Bello	10.6%	62.8%	17.0%	7.6%	2.1%	3913
Bogotá, D.C.	7.4%	73.8%	12.4%	5.1%	1.3%	66042
Bolívar	13.1%	48.4%	21.7%	13.5%	3.2%	10443
Boyacá	8.1%	67.0%	16.4%	7.2%	1.3%	9417
Bucaramanga	6.5%	76.1%	11.6%	4.5%	1.3%	5470
Buenaventura	12.4%	56.7%	17.9%	10.0%	2.9%	3465
Buga	9.9%	61.6%	18.4%	7.3%	2.9%	1155
Caldas	9.5%	62.9%	16.8%	8.9%	1.9%	5757
Cali	8.7%	66.3%	15.5%	7.1%	2.3%	18791
Caquetá	9.8%	56.6%	19.5%	10.5%	3.5%	3275
Cartagena	10.7%	61.6%	17.0%	8.5%	2.3%	10845
Cartago	9.4%	62.0%	17.7%	7.1%	3.8%	1125
Casanare	10.5%	60.3%	18.5%	8.2%	2.6%	2969
Cauca	10.0%	57.1%	18.1%	10.7%	4.0%	12305
Cesar	11.4%	56.5%	19.2%	10.8%	2.0%	8248
Chocó	15.5%	43.1%	21.4%	15.1%	4.8%	3825
Chía	6.9%	76.4%	11.5%	4.6%	0.6%	1326
Ciénaga	11.9%	52.5%	19.8%	11.5%	4.3%	1361
Cundinamarca	7.0%	71.3%	13.7%	6.1%	1.9%	16079
Córdoba	11.7%	51.8%	21.7%	12.5%	2.3%	13337
Cúcuta	9.0%	68.4%	14.7%	7.0%	0.9%	7496
Dosquebradas	9.1%	69.2%	15.5%	5.5%	0.8%	1718
Duitama	5.1%	78.5%	11.4%	4.4%	0.6%	1259
Envigado	6.3%	77.0%	11.0%	5.1%	0.6%	1435
Facatativá	6.5%	76.1%	12.4%	4.5%	0.5%	1342
Florencia	10.6%	61.2%	17.8%	9.1%	1.3%	1996
Floridablanca	7.7%	75.5%	11.0%	5.0%	0.8%	2565
Fusagasugá	8.0%	70.2%	15.0%	6.2%	0.6%	1396
Girardot	10.5%	56.5%	18.3%	13.4%	1.3%	990
Girón	7.1%	70.7%	14.5%	5.7%	2.0%	1355
Guainía	10.9%	52.6%	19.0%	14.3%	3.2%	504
Guaviare	13.9%	50.3%	22.9%	9.3%	3.7%	821
Huila	8.8%	64.2%	18.0%	7.6%	1.5%	8363
Ibagué	7.9%	70.2%	14.0%	6.6%	1.3%	5169
Ipiales	7.2%	73.7%	12.4%	5.7%	1.1%	1298
Itagüí	12.3%	59.4%	19.1%	7.8%	1.4%	1820
Jamundí	10.6%	62.8%	16.1%	9.3%	1.2%	1113

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## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
La Guajira	11.8%	52.8%	20.8%	11.9%	2.7%	3445
Lorica	11.6%	51.8%	20.7%	13.7%	2.2%	1487
Magangué	11.9%	50.9%	22.3%	10.8%	4.0%	1440
Magdalena	12.5%	48.6%	21.3%	14.1%	3.5%	8792
Maicao	13.4%	52.6%	19.9%	12.3%	1.7%	2063
Malambo	9.1%	63.7%	15.7%	9.5%	1.9%	1323
Manizales	8.1%	71.4%	13.7%	5.9%	0.9%	3033
Medellín	11.7%	59.4%	18.2%	8.9%	1.9%	20127
Meta	9.6%	62.5%	17.2%	8.0%	2.6%	5660
Montería	10.2%	59.4%	18.9%	9.7%	1.8%	5224
Mosquera	8.1%	71.2%	13.3%	6.4%	0.9%	1180
Nariño	8.2%	66.6%	15.0%	8.3%	1.8%	9260
Neiva	8.7%	66.1%	17.5%	6.7%	1.1%	3792
Norte de Santander	9.0%	64.4%	16.5%	8.5%	1.6%	7570
Palmira	8.2%	67.2%	16.0%	6.9%	1.7%	2806
Pasto	6.4%	73.3%	13.3%	6.0%	1.0%	4302
Pereira	8.3%	68.0%	15.3%	6.9%	1.4%	4556
Piedecuesta	7.7%	71.7%	13.5%	6.4%	0.7%	1479
Pitalito	8.3%	66.8%	16.6%	7.3%	1.0%	1677
Popayán	8.1%	68.8%	14.7%	6.6%	1.9%	2769
Putumayo	10.3%	57.6%	19.6%	9.5%	3.0%	4103
Quibdó	13.4%	52.7%	18.8%	11.3%	3.9%	1464
Quindío	9.9%	58.5%	19.6%	9.9%	2.1%	2675
Riohacha	11.5%	54.0%	19.8%	12.3%	2.5%	2510
Rionegro	6.8%	74.5%	13.2%	4.8%	0.7%	1163
Risaralda	9.5%	62.4%	17.6%	8.9%	1.5%	2976
Sabaneta	7.6%	68.5%	10.7%	5.3%	7.9%	568
Sahagún	8.6%	62.5%	19.7%	8.4%	0.9%	1250
San Andrés	16.4%	52.6%	19.5%	9.5%	2.1%	483
Santa Marta	11.1%	61.2%	17.1%	8.6%	2.0%	5685
Santander	7.6%	69.5%	14.9%	7.1%	0.9%	8527
Sincedejo	9.5%	61.3%	17.6%	9.1%	2.5%	3151
Soacha	8.5%	68.6%	14.9%	6.9%	1.2%	5303
Sogamoso	6.1%	71.8%	12.4%	6.4%	3.3%	1529
Soledad	8.9%	68.0%	14.6%	7.3%	1.1%	5389
Sucre	11.1%	52.8%	21.4%	12.8%	1.8%	7453
Tolima	9.4%	60.4%	18.4%	9.9%	1.9%	9821
Tuluá	9.0%	68.0%	14.0%	8.1%	0.8%	2187
Tumaco	15.0%	44.1%	19.3%	16.4%	5.3%	2677
Tunja	7.1%	74.9%	12.5%	4.5%	1.0%	1705

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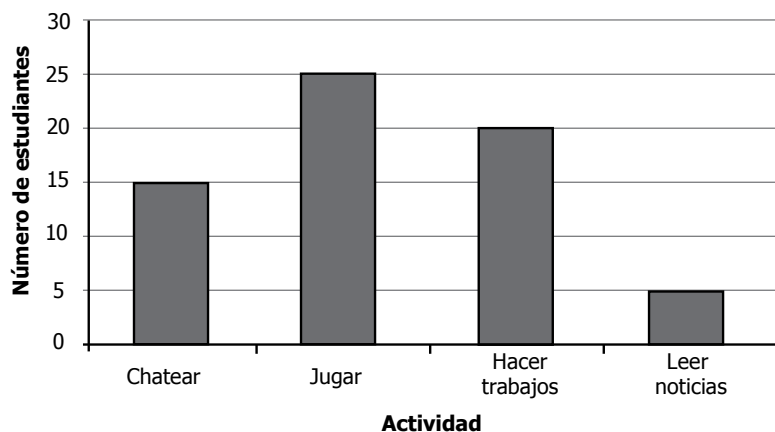


ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Turbo	14.4%	44.8%	23.3%	13.8%	3.8%	1698
Uribe	16.2%	39.0%	23.1%	16.1%	5.6%	987
Valle del Cauca	9.8%	61.8%	17.3%	9.3%	1.8%	9044
Valledupar	8.9%	60.2%	17.2%	9.2%	4.6%	5252
Vaupés	13.4%	30.3%	24.8%	26.1%	5.5%	238
Vichada	14.0%	55.3%	19.7%	9.7%	1.4%	351
Villavicencio	8.4%	70.1%	14.7%	5.5%	1.2%	5502
Yopal	10.0%	67.2%	15.2%	6.3%	1.3%	1833
Zipaquirá	5.8%	77.7%	11.2%	5.0%	0.3%	1373
Colombia	9.5%	63.6%	16.5%	8.4%	2.0%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 15.**

La gráfica presenta información sobre la actividad preferida por un grupo de estudiantes en la sala de cómputo.



**Gráfica**

¿Cuál o cuáles de las siguientes afirmaciones sobre la gráfica es o son verdaderas?

- I. A los estudiantes de este grupo les gusta más chatear que jugar.
- II. La actividad que menos le gusta a los estudiantes de este grupo es leer noticias.
- III. Los estudiantes prefieren jugar o chatear que hacer trabajos o leer noticias.

- A. I solamente.
- B. II y III solamente.
- C. III solamente.
- D. I, II y III.

• **Estructura**

<b>Competencia</b>	Comunicación
<b>Componente</b>	Aleatorio
<b>Afirmación</b>	Describir e Interpretar datos relativos a situaciones del entorno escolar.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	B





- Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	14.0%	33.0%	32.7%	18.2%	2.1%	857
Antioquia	14.5%	41.8%	25.2%	15.0%	3.5%	27707
Apartadó	14.4%	42.3%	26.8%	15.3%	1.3%	1680
Arauca	11.9%	45.0%	26.2%	14.2%	2.7%	2693
Armenia	13.6%	48.6%	24.5%	11.9%	1.4%	2699
Atlántico	16.0%	39.6%	25.1%	16.8%	2.4%	5754
Barrancabermeja	13.9%	47.3%	23.7%	13.7%	1.4%	2577
Barranquilla	13.6%	48.4%	23.5%	12.8%	1.7%	11975
Bello	11.3%	50.9%	23.5%	12.4%	2.0%	3913
Bogotá, D.C.	10.2%	57.5%	20.5%	10.2%	1.5%	66042
Bolívar	15.4%	33.9%	27.4%	19.9%	3.4%	10443
Boyacá	13.6%	48.7%	23.8%	12.4%	1.5%	9417
Bucaramanga	10.4%	59.5%	19.0%	9.5%	1.6%	5470
Buenaventura	16.3%	38.1%	25.7%	17.1%	2.7%	3465
Buga	9.9%	50.8%	25.1%	11.5%	2.7%	1155
Caldas	14.1%	44.8%	25.1%	14.1%	1.8%	5757
Cali	11.8%	51.1%	22.7%	11.7%	2.7%	18791
Caquetá	15.5%	36.3%	28.5%	16.3%	3.2%	3275
Cartagena	14.2%	45.8%	23.4%	14.3%	2.4%	10845
Cartago	13.4%	46.5%	22.8%	14.0%	3.2%	1125
Casanare	15.6%	40.9%	25.2%	15.6%	2.7%	2969
Cauca	15.1%	39.6%	26.3%	14.7%	4.2%	12305
Cesar	14.9%	41.2%	25.6%	16.1%	2.2%	8248
Chocó	15.9%	31.1%	27.7%	20.7%	4.6%	3825
Chía	10.2%	61.9%	18.2%	9.3%	0.5%	1326
Ciénaga	15.8%	37.6%	24.8%	17.6%	4.3%	1361
Cundinamarca	12.1%	51.8%	22.5%	11.6%	2.0%	16079
Córdoba	15.8%	36.7%	27.0%	18.2%	2.4%	13337
Cúcuta	13.9%	50.8%	22.0%	12.4%	0.9%	7496
Dosquebradas	13.2%	51.5%	23.6%	10.8%	0.8%	1718
Duitama	7.9%	66.7%	16.2%	8.5%	0.6%	1259
Envigado	6.5%	64.0%	19.7%	9.3%	0.5%	1435
Facatativá	10.7%	54.3%	22.3%	12.1%	0.6%	1342
Florencia	14.7%	43.2%	25.6%	15.6%	1.0%	1996
Floridablanca	9.0%	62.1%	18.3%	9.6%	1.0%	2565
Fusagasugá	12.0%	50.9%	25.1%	11.2%	0.8%	1396
Girardot	16.0%	39.8%	28.2%	13.6%	2.4%	990
Girón	11.4%	53.3%	22.0%	11.4%	1.9%	1355
Guainía	14.9%	34.9%	31.3%	15.3%	3.6%	504

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## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Guaviare	14.3%	37.4%	27.4%	17.8%	3.2%	821
Huila	12.9%	47.6%	24.7%	13.3%	1.6%	8363
Ibagué	12.0%	54.3%	21.2%	11.0%	1.5%	5169
Ipiales	10.3%	54.5%	22.3%	11.8%	1.1%	1298
Itagüí	14.1%	48.1%	22.8%	13.5%	1.4%	1820
Jamundí	13.7%	44.4%	26.2%	14.4%	1.3%	1113
La Guajira	14.3%	38.3%	27.3%	16.9%	3.2%	3445
Lorica	14.9%	38.1%	25.6%	19.2%	2.3%	1487
Magangué	14.4%	38.2%	24.6%	18.5%	4.3%	1440
Magdalena	17.3%	33.7%	25.9%	19.1%	3.9%	8792
Maicao	16.9%	35.9%	27.0%	18.5%	1.6%	2063
Malambo	13.9%	47.5%	24.5%	12.2%	1.8%	1323
Manizales	11.1%	56.5%	21.0%	10.3%	1.1%	3033
Medellín	13.3%	47.2%	23.2%	14.2%	2.1%	20127
Meta	14.4%	42.6%	25.6%	14.9%	2.6%	5660
Montería	13.8%	44.4%	24.3%	15.7%	1.7%	5224
Mosquera	11.4%	56.3%	21.2%	10.3%	0.8%	1180
Nariño	13.3%	45.5%	26.1%	13.0%	2.2%	9260
Neiva	12.4%	51.1%	22.5%	12.7%	1.3%	3792
Norte de Santander	13.6%	46.3%	24.7%	13.5%	1.9%	7570
Palmira	12.1%	55.5%	19.6%	11.1%	1.7%	2806
Pasto	11.7%	54.6%	22.1%	10.3%	1.3%	4302
Pereira	12.4%	50.9%	22.8%	12.4%	1.5%	4556
Piedecuesta	8.9%	56.0%	21.5%	12.4%	1.1%	1479
Pitalito	15.1%	48.8%	21.5%	13.4%	1.1%	1677
Popayán	12.8%	50.4%	23.9%	11.2%	1.7%	2769
Putumayo	13.5%	42.5%	27.0%	13.9%	3.1%	4103
Quibdó	14.9%	40.5%	24.2%	16.5%	3.9%	1464
Quindío	15.4%	45.1%	24.7%	12.9%	1.9%	2675
Riohacha	14.8%	38.6%	26.9%	17.3%	2.3%	2510
Rionegro	10.0%	59.2%	19.1%	10.6%	1.1%	1163
Risaralda	14.7%	44.1%	25.2%	14.2%	1.8%	2976
Sabaneta	9.5%	56.5%	17.4%	8.8%	7.7%	568
Sahagún	14.0%	43.4%	25.1%	16.4%	1.0%	1250
San Andrés	17.0%	39.5%	24.2%	18.0%	1.2%	483
Santa Marta	15.6%	42.4%	25.3%	14.4%	2.3%	5685
Santander	12.8%	50.9%	23.0%	12.2%	1.1%	8527
Sincedejo	14.2%	45.2%	23.6%	14.3%	2.7%	3151
Soacha	11.2%	52.7%	22.7%	12.0%	1.3%	5303
Sogamoso	10.5%	56.8%	19.0%	10.2%	3.4%	1529

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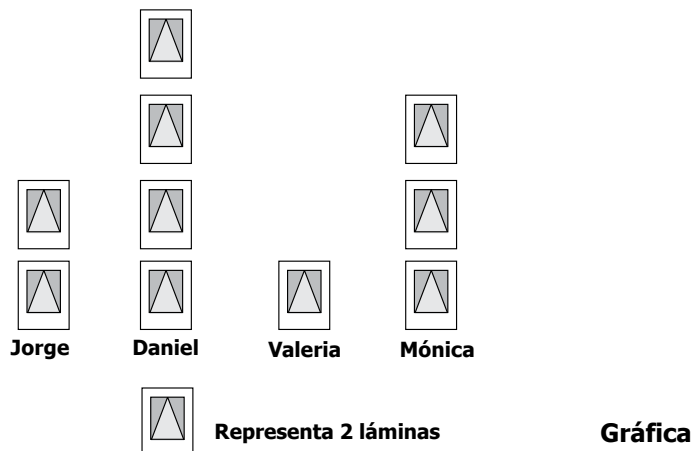


ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Soledad	12.6%	49.2%	23.6%	13.1%	1.4%	5389
Sucre	16.8%	37.0%	26.3%	17.9%	2.0%	7453
Tolima	14.2%	43.1%	26.1%	14.3%	2.2%	9821
Tuluá	13.3%	49.9%	24.2%	11.6%	1.1%	2187
Tumaco	17.1%	31.8%	27.0%	18.5%	5.6%	2677
Tunja	10.4%	61.5%	18.0%	8.9%	1.2%	1705
Turbo	16.8%	33.3%	26.5%	20.0%	3.4%	1698
Uribe	14.5%	30.3%	29.8%	19.4%	6.1%	987
Valle del Cauca	12.8%	45.9%	24.8%	14.2%	2.2%	9044
Valledupar	13.3%	45.1%	22.4%	14.6%	4.6%	5252
Vaupés	20.6%	26.1%	26.1%	22.3%	5.0%	238
Vichada	17.4%	31.6%	31.6%	18.2%	1.1%	351
Villavicencio	12.2%	52.5%	22.4%	11.5%	1.3%	5502
Yopal	11.6%	49.9%	24.1%	13.1%	1.4%	1833
Zipaquirá	10.7%	56.0%	21.8%	10.6%	0.9%	1373
Colombia	13.2%	47.3%	23.8%	13.6%	2.2%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 16.**

Jorge, Daniel, Valeria y Mónica coleccionan láminas. La siguiente gráfica representa la cantidad de láminas que tiene cada uno.



¿Cuál de las siguientes tablas representa la información de la gráfica?

A.	<b>Nombre</b>	<b>Número de láminas</b>
	Jorge	4
	Daniel	8
	Valeria	2
	Mónica	6

B.	<b>Nombre</b>	<b>Número de láminas</b>
	Jorge	4
	Daniel	6
	Valeria	8
	Mónica	2

C.	<b>Nombre</b>	<b>Número de láminas</b>
	Jorge	8
	Daniel	6
	Valeria	4
	Mónica	2

D.	<b>Nombre</b>	<b>Número de láminas</b>
	Jorge	2
	Daniel	4
	Valeria	6
	Mónica	8

• **Estructura**

<b>Competencia</b>	Comunicación
<b>Componente</b>	Aleatorio
<b>Afirmación</b>	Clasificar y organizar la presentación de datos.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	A



## • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	39.8%	13.8%	12.4%	31.6%	2.5%	857
Antioquia	50.8%	8.7%	9.3%	27.6%	3.6%	27707
Apartadó	45.8%	10.6%	12.1%	29.8%	1.7%	1680
Arauca	54.7%	9.2%	8.3%	25.5%	2.2%	2693
Armenia	55.1%	7.9%	8.9%	26.2%	1.9%	2699
Atlántico	45.0%	11.1%	12.6%	28.8%	2.5%	5754
Barrancabermeja	53.6%	9.2%	9.4%	26.3%	1.6%	2577
Barranquilla	54.2%	8.6%	8.5%	26.9%	1.8%	11975
Bello	56.3%	7.2%	9.4%	24.7%	2.4%	3913
Bogotá, D.C.	63.8%	6.0%	6.1%	22.5%	1.7%	66042
Bolívar	39.5%	13.2%	14.4%	29.4%	3.5%	10443
Boyacá	57.2%	7.5%	7.7%	25.9%	1.6%	9417
Bucaramanga	63.8%	6.2%	6.2%	22.1%	1.7%	5470
Buenaventura	48.5%	9.8%	9.7%	29.0%	3.0%	3465
Buga	55.9%	9.3%	9.4%	22.4%	3.0%	1155
Caldas	54.0%	8.1%	8.5%	27.2%	2.2%	5757
Cali	57.8%	7.5%	7.6%	24.3%	2.8%	18791
Caquetá	50.0%	9.7%	9.5%	27.3%	3.5%	3275
Cartagena	50.6%	9.8%	9.9%	27.1%	2.6%	10845
Cartago	53.6%	9.3%	10.1%	23.6%	3.3%	1125
Casanare	49.1%	9.1%	9.7%	29.1%	3.0%	2969
Cauca	52.7%	8.6%	9.0%	25.4%	4.3%	12305
Cesar	45.2%	11.3%	11.9%	29.3%	2.3%	8248
Chocó	38.0%	13.5%	14.4%	29.4%	4.7%	3825
Chía	68.1%	5.7%	5.4%	20.3%	0.5%	1326
Ciénaga	44.9%	9.8%	11.6%	29.4%	4.3%	1361
Cundinamarca	61.6%	6.8%	6.6%	22.8%	2.2%	16079
Córdoba	42.0%	12.2%	12.4%	30.9%	2.5%	13337
Cúcuta	57.5%	7.4%	7.7%	26.2%	1.2%	7496
Dosquebradas	58.6%	7.0%	6.2%	27.0%	1.2%	1718
Duitama	73.4%	5.2%	5.8%	14.7%	0.9%	1259
Envigado	70.7%	5.2%	5.9%	17.2%	1.0%	1435
Facatativá	63.5%	6.0%	6.2%	23.7%	0.7%	1342
Florencia	49.5%	8.4%	10.1%	30.8%	1.3%	1996
Floridablanca	66.6%	6.0%	6.2%	20.2%	1.1%	2565
Fusagasugá	56.8%	7.1%	7.7%	27.3%	1.1%	1396
Girardot	46.5%	11.2%	11.5%	29.6%	1.2%	990
Girón	58.4%	6.4%	7.7%	25.2%	2.3%	1355

Continúa en la siguiente página

## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Guainía	33.9%	12.9%	15.5%	33.3%	4.4%	504
Guaviare	45.9%	13.0%	11.1%	26.6%	3.4%	821
Huila	54.0%	8.0%	7.8%	28.5%	1.7%	8363
Ibagué	60.6%	7.6%	6.9%	23.4%	1.4%	5169
Ipiales	66.4%	6.2%	6.9%	19.6%	1.0%	1298
Itagüí	54.8%	12.2%	10.3%	21.1%	1.5%	1820
Jamundí	53.0%	8.6%	11.0%	26.4%	1.0%	1113
La Guajira	43.6%	12.3%	12.3%	28.6%	3.2%	3445
Lorica	41.3%	14.3%	13.7%	29.1%	1.7%	1487
Magangué	39.4%	11.1%	13.1%	32.4%	4.0%	1440
Magdalena	40.7%	12.5%	13.5%	29.2%	4.1%	8792
Maicao	39.7%	11.3%	14.1%	32.8%	2.0%	2063
Malambo	54.7%	8.7%	7.9%	26.1%	2.6%	1323
Manizales	61.3%	6.7%	6.4%	24.4%	1.2%	3033
Medellín	52.3%	10.4%	10.7%	24.5%	2.0%	20127
Meta	51.6%	8.9%	9.6%	27.0%	3.0%	5660
Montería	45.7%	10.1%	12.1%	29.8%	2.3%	5224
Mosquera	64.5%	5.8%	7.1%	21.7%	0.8%	1180
Nariño	60.3%	7.0%	6.9%	23.5%	2.3%	9260
Neiva	54.4%	8.6%	8.2%	27.6%	1.3%	3792
Norte de Santander	57.7%	7.5%	7.6%	25.2%	2.0%	7570
Palmira	59.9%	7.8%	8.6%	22.0%	1.8%	2806
Pasto	62.8%	6.1%	6.5%	23.3%	1.3%	4302
Pereira	56.6%	6.9%	7.0%	27.6%	1.9%	4556
Piedecuesta	60.4%	7.3%	7.8%	23.4%	1.1%	1479
Pitalito	56.3%	8.3%	8.1%	26.0%	1.3%	1677
Popayán	60.3%	6.1%	7.1%	24.6%	2.0%	2769
Putumayo	52.5%	9.0%	9.4%	25.6%	3.4%	4103
Quibdó	43.4%	12.0%	12.5%	27.8%	4.2%	1464
Quindío	48.6%	9.5%	9.5%	30.1%	2.3%	2675
Riohacha	44.1%	12.0%	11.4%	29.9%	2.7%	2510
Rionegro	63.5%	7.7%	6.6%	20.7%	1.5%	1163
Risaralda	52.8%	7.8%	7.9%	29.5%	2.1%	2976
Sabaneta	60.7%	6.3%	6.5%	18.5%	7.9%	568
Sahagún	53.4%	8.9%	10.2%	25.9%	1.5%	1250
San Andrés	40.0%	12.8%	17.2%	28.8%	1.2%	483
Santa Marta	48.8%	8.8%	10.0%	30.1%	2.3%	5685
Santander	61.5%	6.5%	7.1%	23.7%	1.2%	8527
Sincelejo	49.6%	9.6%	10.1%	27.6%	3.0%	3151
Soacha	57.0%	6.9%	7.3%	27.5%	1.4%	5303

Continúa en la siguiente página

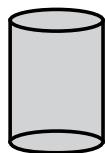


ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Sogamoso	60.3%	7.5%	7.3%	21.3%	3.7%	1529
Soledad	57.1%	8.3%	7.8%	25.3%	1.5%	5389
Sucre	43.2%	12.0%	12.9%	29.8%	2.2%	7453
Tolima	50.8%	8.6%	9.7%	28.6%	2.3%	9821
Tuluá	56.7%	7.1%	7.0%	28.0%	1.1%	2187
Tumaco	38.2%	14.5%	13.8%	27.6%	5.9%	2677
Tunja	69.6%	5.6%	6.3%	17.0%	1.5%	1705
Turbo	33.7%	13.8%	14.0%	34.3%	4.1%	1698
Uribe	33.2%	14.5%	15.1%	30.3%	6.9%	987
Valle del Cauca	54.1%	9.4%	8.9%	25.4%	2.2%	9044
Valledupar	52.0%	8.6%	8.9%	25.7%	4.8%	5252
Vaupés	27.3%	13.9%	12.6%	40.3%	5.9%	238
Vichada	41.9%	10.0%	12.8%	33.0%	2.3%	351
Villavicencio	60.1%	7.5%	6.8%	24.0%	1.6%	5502
Yopal	56.0%	7.3%	8.0%	27.1%	1.6%	1833
Zipaquirá	64.5%	5.0%	6.1%	23.3%	1.0%	1373
Colombia	54.3%	8.5%	8.9%	25.9%	2.3%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 17.**

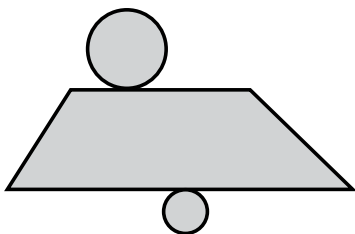
Mónica quiere construir un cilindro como el de la figura, utilizando un molde.



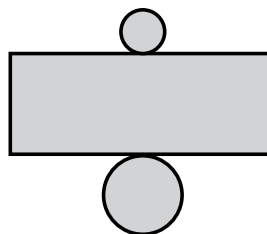
**Figura**

¿Cuál de los siguientes moldes debe utilizar?

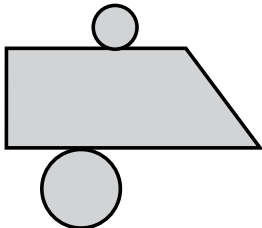
A.



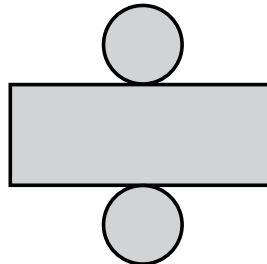
B.



C.



D.



• **Estructura**

<b>Competencia</b>	Razonamiento
<b>Componente</b>	Espacial - métrico
<b>Afirmación</b>	Relacionar objetos tridimensionales y sus propiedades con sus respectivos desarrollos planos.
<b>Nivel de desempeño</b>	Mínimo
<b>Respuesta Correcta</b>	D





## • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	12.5%	12.4%	6.8%	67.0%	1.4%	857
Antioquia	8.8%	9.9%	3.9%	74.3%	3.1%	27707
Apartadó	14.5%	12.2%	4.6%	67.9%	0.8%	1680
Arauca	8.4%	8.3%	3.5%	78.1%	1.7%	2693
Armenia	7.6%	8.4%	3.4%	79.4%	1.2%	2699
Atlántico	11.3%	11.7%	5.5%	69.8%	1.7%	5754
Barrancabermeja	10.4%	10.2%	4.6%	73.7%	1.0%	2577
Barranquilla	8.2%	9.2%	3.9%	77.5%	1.2%	11975
Bello	8.6%	8.2%	3.5%	77.9%	1.7%	3913
Bogotá, D.C.	5.1%	6.5%	2.5%	84.6%	1.2%	66042
Bolívar	14.7%	15.2%	6.4%	61.0%	2.5%	10443
Boyacá	6.0%	8.6%	3.0%	81.1%	1.3%	9417
Bucaramanga	5.3%	6.3%	2.1%	85.0%	1.2%	5470
Buenaventura	10.2%	10.6%	4.3%	72.6%	2.2%	3465
Buga	10.7%	10.2%	3.1%	73.4%	2.5%	1155
Caldas	8.1%	10.0%	3.5%	76.9%	1.5%	5757
Cali	7.7%	8.3%	3.1%	78.8%	2.1%	18791
Caquetá	8.4%	10.7%	4.5%	73.6%	2.8%	3275
Cartagena	11.2%	10.1%	4.3%	72.7%	1.7%	10845
Cartago	10.6%	10.5%	3.4%	73.2%	2.4%	1125
Casanare	7.9%	9.9%	3.9%	76.0%	2.4%	2969
Cauca	7.8%	9.9%	3.8%	74.9%	3.7%	12305
Cesar	12.9%	12.2%	4.6%	68.8%	1.6%	8248
Chocó	15.0%	15.7%	5.9%	59.2%	4.1%	3825
Chía	4.3%	5.4%	1.7%	88.3%	0.2%	1326
Ciénaga	11.4%	12.3%	3.8%	69.3%	3.2%	1361
Cundinamarca	5.3%	7.2%	3.0%	82.7%	1.8%	16079
Córdoba	12.0%	14.3%	5.4%	66.6%	1.7%	13337
Cúcuta	7.1%	8.0%	3.4%	80.9%	0.5%	7496
Dosquebradas	6.5%	7.8%	3.0%	82.1%	0.6%	1718
Duitama	3.5%	4.8%	1.9%	89.0%	0.8%	1259
Envigado	5.9%	4.2%	2.2%	87.5%	0.2%	1435
Facatativá	5.1%	6.2%	2.2%	86.1%	0.4%	1342
Florencia	9.3%	9.2%	4.2%	76.7%	0.7%	1996
Floridablanca	4.8%	6.2%	2.1%	86.1%	0.7%	2565
Fusagasugá	4.4%	9.1%	2.3%	83.9%	0.4%	1396
Girardot	9.9%	12.5%	4.4%	72.5%	0.6%	990
Girón	6.6%	8.3%	3.2%	80.2%	1.7%	1355

Continúa en la siguiente página

## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Guainía	9.1%	12.3%	4.2%	70.8%	3.6%	504
Guaviare	12.9%	12.9%	3.9%	67.2%	3.0%	821
Huila	6.1%	9.6%	3.1%	80.2%	1.1%	8363
Ibagué	6.7%	8.2%	2.5%	81.6%	1.0%	5169
Ipiales	5.4%	7.5%	1.5%	84.8%	0.8%	1298
Itagüí	16.1%	9.7%	4.3%	68.1%	1.8%	1820
Jamundí	10.9%	9.0%	4.2%	75.1%	0.8%	1113
La Guajira	12.2%	11.9%	6.2%	67.8%	1.8%	3445
Lorica	14.5%	15.6%	5.2%	63.2%	1.5%	1487
Magangué	10.1%	13.3%	5.2%	68.0%	3.3%	1440
Magdalena	13.4%	14.3%	6.5%	62.9%	3.0%	8792
Maicao	14.4%	12.3%	5.5%	66.5%	1.2%	2063
Malambo	7.7%	8.0%	3.8%	78.5%	2.0%	1323
Manizales	5.4%	7.3%	2.9%	83.5%	0.9%	3033
Medellín	12.8%	10.8%	4.4%	70.5%	1.5%	20127
Meta	7.6%	9.2%	3.3%	77.5%	2.4%	5660
Montería	10.3%	10.8%	4.3%	73.4%	1.2%	5224
Mosquera	5.6%	5.8%	1.6%	86.4%	0.5%	1180
Nariño	5.8%	8.2%	2.9%	81.5%	1.6%	9260
Neiva	7.8%	9.0%	3.5%	78.7%	1.0%	3792
Norte de Santander	7.2%	9.2%	3.5%	78.9%	1.3%	7570
Palmira	6.8%	8.9%	3.2%	79.9%	1.2%	2806
Pasto	5.4%	6.2%	2.3%	85.1%	1.0%	4302
Pereira	6.3%	7.3%	3.7%	81.5%	1.3%	4556
Piedecuesta	6.7%	7.0%	2.7%	83.0%	0.7%	1479
Pitalito	6.1%	8.9%	3.0%	81.3%	0.7%	1677
Popayán	6.6%	7.7%	2.6%	81.4%	1.6%	2769
Putumayo	8.1%	9.6%	3.7%	75.6%	3.0%	4103
Quibdó	15.4%	13.3%	6.5%	61.2%	3.6%	1464
Quindío	8.8%	9.4%	4.0%	76.2%	1.5%	2675
Riohacha	13.2%	10.9%	5.0%	69.2%	1.7%	2510
Rionegro	6.8%	8.3%	2.7%	81.3%	0.9%	1163
Risaralda	6.9%	7.9%	3.7%	80.0%	1.4%	2976
Sabaneta	7.6%	6.3%	2.5%	76.4%	7.2%	568
Sahagún	9.0%	11.5%	4.0%	74.8%	0.7%	1250
San Andrés	19.3%	12.4%	5.2%	62.5%	0.6%	483
Santa Marta	10.2%	10.5%	3.9%	73.8%	1.5%	5685
Santander	5.8%	8.3%	3.2%	81.9%	0.9%	8527
Sincelejo	9.0%	10.5%	4.2%	74.1%	2.2%	3151
Soacha	6.5%	7.3%	2.8%	82.4%	1.0%	5303

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Sogamoso	4.3%	7.2%	2.3%	83.0%	3.3%	1529
Soledad	8.2%	8.2%	3.3%	79.5%	0.9%	5389
Sucre	11.9%	14.1%	5.8%	66.8%	1.5%	7453
Tolima	8.0%	11.4%	4.1%	74.8%	1.6%	9821
Tuluá	7.2%	9.4%	3.3%	79.3%	0.7%	2187
Tumaco	15.1%	15.1%	6.6%	58.5%	4.7%	2677
Tunja	5.5%	6.7%	2.0%	84.9%	0.9%	1705
Turbo	15.6%	15.6%	5.4%	60.2%	3.2%	1698
Uribe	15.7%	16.4%	7.2%	55.4%	5.3%	987
Valle del Cauca	8.4%	10.0%	4.0%	75.9%	1.7%	9044
Valledupar	9.0%	9.8%	4.0%	73.3%	3.9%	5252
Vaupés	8.4%	11.8%	4.2%	70.6%	5.0%	238
Vichada	8.5%	10.8%	4.0%	75.2%	1.4%	351
Villavicencio	6.5%	7.5%	3.3%	81.8%	1.0%	5502
Yopal	6.9%	8.4%	3.4%	80.2%	1.1%	1833
Zipaquirá	4.5%	6.0%	1.9%	86.8%	0.8%	1373
Colombia	8.4%	9.4%	3.7%	76.7%	1.7%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 18.**

Mauricio compró una chocolatina de 100 g para compartir con sus compañeros. Primero partió la chocolatina en dos partes iguales, y volvió a partir cada una de ellas en dos partes iguales.

En la siguiente tabla, Mauricio está anotando el número de partes en que quedó dividida la chocolatina y la cantidad de gramos de cada una de las partes.

Número de partes en que se divide la chocolatina	Cantidad de gramos en cada parte
1	100
2	50
4	

**Tabla**

¿Cuál de los siguientes números completa la tabla de Mauricio?

- A. 25
- B. 50
- C. 100
- D. 400

• **Estructura**

<b>Competencia</b>	Resolución
<b>Componente</b>	Numérico - variacional
<b>Afirmación</b>	Resolver y formular problemas sencillos de proporcionalidad directa e inversa.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	A

• **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	39.4%	22.5%	22.5%	13.8%	1.8%	857
Antioquia	52.9%	16.1%	17.3%	10.4%	3.3%	27707
Apartadó	47.4%	21.0%	19.6%	10.8%	1.2%	1680
Arauca	55.7%	16.7%	15.9%	9.8%	1.9%	2693
Armenia	60.8%	14.0%	14.4%	8.9%	1.8%	2699
Atlántico	46.6%	18.5%	21.3%	11.4%	2.2%	5754
Barrancabermeja	56.9%	16.4%	16.1%	9.3%	1.4%	2577
Barranquilla	58.7%	15.8%	14.6%	9.3%	1.5%	11975

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Bello	60.1%	15.5%	12.4%	10.3%	1.8%	3913
Bogotá, D.C.	70.0%	11.4%	9.9%	7.3%	1.4%	66042
Bolívar	37.7%	21.4%	25.3%	12.6%	3.0%	10443
Boyacá	61.7%	13.8%	13.9%	9.2%	1.4%	9417
Bucaramanga	71.8%	10.1%	9.0%	7.7%	1.4%	5470
Buenaventura	48.7%	17.5%	21.0%	9.8%	2.9%	3465
Buga	59.1%	14.2%	15.5%	8.2%	2.9%	1155
Caldas	56.3%	15.2%	16.7%	10.3%	1.5%	5757
Cali	61.3%	14.4%	12.5%	9.2%	2.5%	18791
Caquetá	49.0%	17.2%	19.5%	10.8%	3.5%	3275
Cartagena	52.6%	17.5%	17.7%	10.1%	2.1%	10845
Cartago	58.3%	17.6%	13.1%	8.2%	2.8%	1125
Casanare	54.7%	17.0%	15.8%	10.1%	2.4%	2969
Cauca	52.1%	15.3%	18.6%	10.0%	4.0%	12305
Cesar	47.3%	20.5%	19.8%	10.4%	2.0%	8248
Chocó	34.9%	20.3%	26.1%	13.7%	4.9%	3825
Chía	72.8%	10.8%	9.4%	6.7%	0.3%	1326
Ciénaga	45.5%	17.0%	22.1%	11.6%	3.8%	1361
Cundinamarca	65.2%	12.9%	11.9%	7.9%	2.0%	16079
Córdoba	41.7%	20.0%	23.4%	12.8%	2.1%	13337
Cúcuta	63.3%	14.5%	13.2%	8.1%	0.9%	7496
Dosquebradas	64.6%	13.9%	12.3%	8.6%	0.6%	1718
Duitama	75.5%	9.9%	7.6%	6.1%	0.9%	1259
Envigado	73.2%	11.1%	7.8%	7.6%	0.2%	1435
Facatativá	68.3%	12.8%	10.1%	8.3%	0.4%	1342
Florencia	54.1%	17.6%	17.1%	10.0%	1.2%	1996
Floridablanca	71.6%	10.6%	10.5%	6.4%	0.9%	2565
Fusagasugá	65.9%	11.0%	12.6%	9.7%	0.8%	1396
Girardot	49.7%	16.8%	20.3%	12.2%	1.0%	990
Girón	62.5%	14.3%	12.5%	8.9%	1.8%	1355
Guainía	39.9%	22.4%	21.2%	12.1%	4.4%	504
Guaviare	45.2%	20.5%	21.1%	9.7%	3.5%	821
Huila	57.6%	13.7%	16.9%	10.5%	1.3%	8363
Ibagué	65.2%	13.3%	12.1%	8.0%	1.3%	5169
Ipiales	70.7%	11.3%	10.2%	7.0%	0.8%	1298
Itagüí	53.1%	22.3%	14.3%	8.9%	1.4%	1820
Jamundí	55.2%	19.0%	15.4%	9.3%	1.3%	1113
La Guajira	43.1%	18.8%	23.2%	12.1%	2.8%	3445
Lorica	44.7%	19.3%	22.9%	11.2%	2.0%	1487
Magangué	45.1%	15.6%	24.0%	11.4%	3.9%	1440

Continúa en la siguiente página

## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Magdalena	39.8%	20.0%	24.2%	12.5%	3.5%	8792
Maicao	40.8%	21.2%	24.2%	11.9%	1.9%	2063
Malambo	55.6%	17.1%	15.4%	10.1%	1.8%	1323
Manizales	68.5%	11.4%	10.3%	8.7%	1.1%	3033
Medellín	54.6%	18.0%	15.9%	9.7%	1.8%	20127
Meta	55.7%	16.5%	15.9%	9.4%	2.5%	5660
Montería	49.2%	18.1%	18.8%	12.3%	1.6%	5224
Mosquera	67.3%	11.9%	11.1%	9.3%	0.4%	1180
Nariño	60.5%	12.8%	15.1%	9.7%	1.8%	9260
Neiva	59.6%	14.8%	13.9%	10.5%	1.2%	3792
Norte de Santander	58.1%	15.3%	16.5%	8.5%	1.6%	7570
Palmira	62.5%	13.0%	13.6%	9.3%	1.6%	2806
Pasto	68.1%	11.7%	10.4%	8.5%	1.3%	4302
Pereira	63.1%	14.7%	12.7%	7.9%	1.5%	4556
Piedecuesta	64.2%	13.9%	12.0%	9.0%	0.9%	1479
Pitalito	60.2%	15.3%	14.5%	8.6%	1.3%	1677
Popayán	65.1%	13.7%	12.2%	7.4%	1.7%	2769
Putumayo	52.4%	16.9%	17.2%	10.3%	3.3%	4103
Quibdó	42.0%	18.6%	22.0%	13.1%	4.2%	1464
Quindío	54.4%	16.0%	18.1%	9.1%	2.4%	2675
Riohacha	45.1%	18.6%	22.5%	11.8%	2.1%	2510
Rionegro	68.8%	12.4%	10.1%	7.8%	0.9%	1163
Risaralda	57.9%	14.8%	15.1%	10.4%	1.9%	2976
Sabaneta	64.3%	13.0%	9.0%	6.0%	7.7%	568
Sahagún	54.2%	15.9%	19.3%	10.0%	0.6%	1250
San Andrés	46.0%	23.0%	19.9%	10.4%	0.8%	483
Santa Marta	54.4%	16.0%	17.2%	10.5%	1.9%	5685
Santander	63.9%	13.0%	13.3%	9.0%	0.9%	8527
Sincelejo	52.2%	17.2%	18.0%	10.4%	2.2%	3151
Soacha	65.8%	12.5%	11.2%	9.3%	1.2%	5303
Sogamoso	67.3%	11.6%	10.7%	6.9%	3.5%	1529
Soledad	60.9%	15.2%	14.5%	8.4%	1.0%	5389
Sucre	42.7%	19.5%	24.0%	12.0%	1.8%	7453
Tolima	54.0%	16.5%	17.7%	9.7%	2.1%	9821
Tuluá	63.2%	14.5%	12.6%	8.7%	1.0%	2187
Tumaco	33.1%	21.6%	25.7%	14.2%	5.4%	2677
Tunja	73.5%	10.4%	9.2%	5.6%	1.2%	1705
Turbo	35.5%	22.9%	25.7%	12.5%	3.4%	1698
Uribe	28.8%	21.2%	29.8%	14.1%	6.2%	987
Valle del Cauca	55.3%	15.8%	16.2%	10.7%	2.0%	9044

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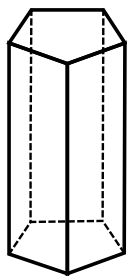


ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Valledupar	54.7%	15.1%	16.1%	9.8%	4.4%	5252
Vaupés	31.5%	17.6%	32.4%	13.0%	5.5%	238
Vichada	47.3%	19.1%	20.2%	11.4%	2.0%	351
Villavicencio	65.1%	13.2%	12.3%	8.2%	1.2%	5502
Yopal	63.0%	14.8%	12.5%	8.5%	1.1%	1833
Zipaquirá	71.5%	9.3%	11.1%	7.4%	0.7%	1373
Colombia	57.5%	15.3%	15.6%	9.6%	2.0%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 19.**

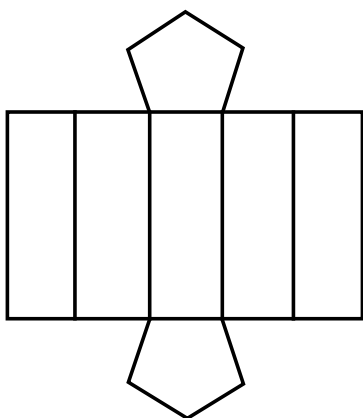
Francisco utilizó un molde de cartulina para construir una caja como la que se muestra en la figura.



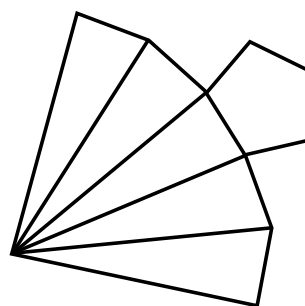
**Figura**

¿Con cuál de los siguientes moldes construyó la caja?

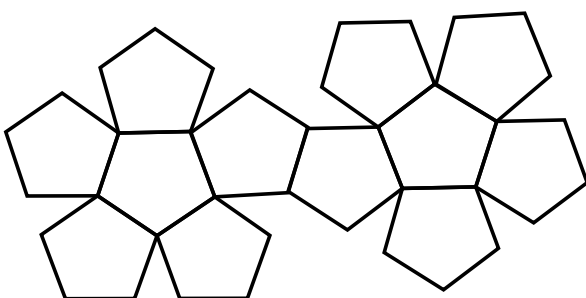
A.



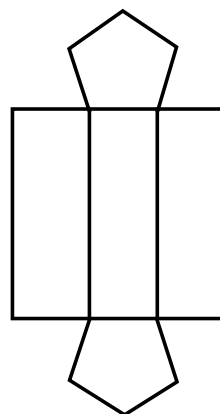
B.



C.



D.







- **Estructura**

<b>Competencia</b>	Razonamiento
<b>Componente</b>	Espacial - métrico
<b>Afirmación</b>	Relacionar objetos tridimensionales y sus propiedades con sus respectivos desarrollos planos.
<b>Nivel de desempeño</b>	Mínimo
<b>Respuesta Correcta</b>	A

- **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	48.9%	9.8%	14.7%	24.2%	2.5%	857
Antioquia	54.8%	8.2%	8.0%	25.5%	3.5%	27707
Apartadó	52.9%	9.2%	11.7%	24.9%	1.3%	1680
Arauca	61.2%	7.4%	7.3%	21.9%	2.2%	2693
Armenia	63.8%	7.3%	6.4%	21.0%	1.6%	2699
Atlántico	53.1%	9.6%	10.9%	23.7%	2.8%	5754
Barrancabermeja	59.4%	7.3%	8.5%	23.6%	1.3%	2577
Barranquilla	60.8%	7.9%	7.8%	21.8%	1.7%	11975
Bello	62.3%	7.1%	7.5%	21.1%	2.1%	3913
Bogotá, D.C.	71.8%	4.8%	4.9%	17.1%	1.5%	66042
Bolívar	43.3%	12.3%	13.8%	27.1%	3.5%	10443
Boyacá	65.2%	6.3%	5.9%	21.1%	1.4%	9417
Bucaramanga	71.0%	5.1%	4.4%	18.0%	1.4%	5470
Buenaventura	50.1%	9.1%	9.4%	28.5%	2.8%	3465
Buga	62.3%	8.7%	7.0%	19.3%	2.8%	1155
Caldas	57.7%	7.5%	7.9%	25.0%	1.8%	5757
Cali	64.2%	6.3%	6.3%	20.5%	2.7%	18791
Caquetá	55.1%	9.1%	8.1%	24.2%	3.5%	3275
Cartagena	56.4%	8.8%	9.4%	23.1%	2.4%	10845
Cartago	59.4%	7.9%	9.4%	20.4%	2.9%	1125
Casanare	59.3%	7.3%	8.3%	22.7%	2.4%	2969
Cauca	55.8%	7.3%	7.8%	25.0%	4.2%	12305
Cesar	49.9%	11.1%	11.5%	25.3%	2.1%	8248
Chocó	38.5%	13.4%	12.5%	30.5%	5.1%	3825
Chía	74.7%	4.8%	3.4%	16.6%	0.5%	1326
Ciénaga	50.5%	8.4%	10.1%	27.2%	3.8%	1361
Cundinamarca	66.1%	5.7%	6.1%	20.1%	2.1%	16079
Córdoba	47.7%	11.2%	11.5%	27.3%	2.3%	13337

Continúa en la siguiente página

## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Cúcuta	64.3%	6.7%	6.9%	21.3%	0.9%	7496
Dosquebradas	64.6%	5.2%	6.7%	22.5%	1.1%	1718
Duitama	77.5%	5.0%	4.2%	12.6%	0.6%	1259
Envigado	77.9%	5.3%	5.0%	11.4%	0.3%	1435
Facatativá	70.0%	4.8%	4.4%	20.3%	0.5%	1342
Florencia	63.1%	7.6%	8.3%	19.7%	1.2%	1996
Floridablanca	72.1%	4.9%	4.8%	17.3%	0.9%	2565
Fusagasugá	69.8%	5.5%	5.5%	18.4%	0.8%	1396
Girardot	57.9%	9.3%	7.9%	23.9%	1.0%	990
Girón	63.2%	6.4%	7.4%	21.0%	1.9%	1355
Guainía	53.8%	8.9%	8.5%	25.2%	3.6%	504
Guaviare	49.0%	9.7%	10.4%	27.3%	3.7%	821
Huila	62.1%	6.6%	6.1%	23.8%	1.4%	8363
Ibagué	66.6%	6.8%	5.9%	19.3%	1.5%	5169
Ipiales	68.7%	4.5%	5.9%	20.0%	0.9%	1298
Itagüí	57.4%	11.4%	10.3%	19.1%	1.8%	1820
Jamundí	58.5%	7.9%	9.2%	23.5%	1.0%	1113
La Guajira	47.9%	11.8%	11.7%	26.1%	2.6%	3445
Lorica	47.4%	11.4%	12.8%	26.3%	2.2%	1487
Magangué	48.5%	9.5%	9.3%	28.6%	4.0%	1440
Magdalena	45.8%	11.6%	12.5%	26.0%	4.1%	8792
Maicao	47.1%	9.9%	12.0%	29.1%	1.9%	2063
Malambo	62.2%	7.4%	7.0%	21.2%	2.2%	1323
Manizales	66.6%	5.3%	5.9%	21.2%	1.0%	3033
Medellín	58.3%	9.3%	9.8%	20.5%	2.2%	20127
Meta	60.7%	7.7%	7.2%	21.7%	2.8%	5660
Montería	54.8%	9.6%	9.4%	24.4%	1.8%	5224
Mosquera	71.9%	4.2%	4.6%	18.6%	0.7%	1180
Nariño	61.1%	5.9%	6.0%	25.0%	1.9%	9260
Neiva	63.7%	6.8%	7.1%	21.2%	1.2%	3792
Norte de Santander	60.8%	7.1%	6.8%	23.6%	1.7%	7570
Palmira	67.9%	6.5%	5.9%	18.3%	1.5%	2806
Pasto	70.3%	5.6%	4.6%	18.2%	1.3%	4302
Pereira	64.7%	6.3%	6.1%	21.4%	1.6%	4556
Piedecuesta	66.9%	6.2%	6.2%	19.9%	0.8%	1479
Pitalito	65.6%	6.1%	6.7%	20.4%	1.3%	1677
Popayán	66.7%	5.7%	5.6%	20.2%	1.9%	2769
Putumayo	59.6%	7.8%	7.8%	21.6%	3.2%	4103
Quibdó	44.4%	13.2%	11.9%	26.6%	3.9%	1464
Quindío	57.3%	8.7%	8.0%	24.0%	2.0%	2675

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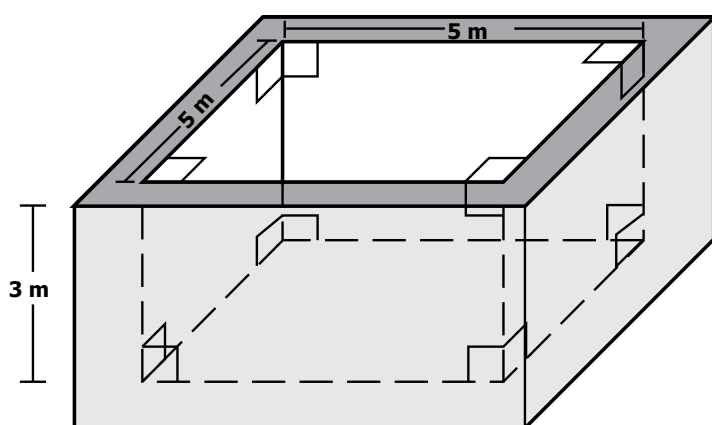


ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Riohacha	51.7%	10.4%	9.9%	25.5%	2.5%	2510
Rionegro	66.6%	6.7%	5.2%	20.6%	0.9%	1163
Risaralda	57.6%	7.2%	7.1%	26.2%	1.9%	2976
Sabaneta	63.4%	7.6%	4.6%	16.5%	7.9%	568
Sahagún	57.5%	10.6%	9.5%	21.3%	1.0%	1250
San Andrés	47.2%	10.1%	13.5%	27.3%	1.9%	483
Santa Marta	56.2%	8.9%	8.3%	24.5%	2.1%	5685
Santander	64.9%	6.4%	6.1%	21.7%	1.0%	8527
Sincelejo	57.3%	8.9%	8.7%	22.4%	2.6%	3151
Soacha	67.6%	5.4%	5.7%	20.0%	1.2%	5303
Sogamoso	69.7%	5.4%	5.3%	16.0%	3.7%	1529
Soledad	64.8%	6.4%	7.1%	20.4%	1.4%	5389
Sucre	48.1%	11.3%	10.7%	27.8%	2.0%	7453
Tolima	57.3%	8.0%	7.9%	24.8%	2.0%	9821
Tuluá	63.6%	7.2%	5.9%	22.1%	1.2%	2187
Tumaco	40.6%	13.7%	12.4%	28.0%	5.4%	2677
Tunja	73.7%	4.7%	4.3%	16.2%	1.1%	1705
Turbo	38.6%	13.2%	13.5%	30.7%	3.9%	1698
Uribe	38.2%	14.4%	14.5%	27.0%	6.0%	987
Valle del Cauca	58.6%	8.3%	7.5%	23.5%	2.1%	9044
Valledupar	56.2%	8.3%	7.9%	23.0%	4.6%	5252
Vaupés	44.1%	9.7%	11.8%	29.0%	5.5%	238
Vichada	55.6%	8.5%	8.0%	25.9%	2.0%	351
Villavicencio	68.6%	6.1%	5.8%	18.2%	1.3%	5502
Yopal	66.4%	6.5%	5.6%	19.9%	1.6%	1833
Zipaquirá	72.5%	4.8%	3.4%	18.4%	0.9%	1373
Colombia	60.5%	7.6%	7.6%	22.1%	2.2%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 20.**

Adela quiere saber cuánta agua cabe en una piscina que tiene la forma y las medidas indicadas en la figura.



Los ángulos señalados en la figura son rectos.

**Figura**

¿Cuál o cuáles de los siguientes procedimientos le sirve(n) a Adela para calcular cuánta agua, en  $m^3$ , cabe en la piscina?

- |      |                       |
|------|-----------------------|
| I.   | $5 \times 5 \times 3$ |
| II.  | $6 \times 7 \times 3$ |
| III. | $3 + 7 + 5 + 5 + 6$   |

- A. I solamente.  
 B. II solamente.  
 C. I y III solamente.  
 D. II y III solamente.

• **Estructura**

<b>Competencia</b>	Resolución
<b>Componente</b>	Espacial - métrico
<b>Afirmación</b>	Resuelve problemas utilizando diferentes procedimientos de cálculo para hallar medidas de superficies y volúmenes.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	A



## • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	30.8%	18.6%	22.9%	25.1%	2.7%	857
Antioquia	43.4%	14.5%	19.6%	18.8%	3.7%	27707
Apartadó	37.9%	17.4%	23.4%	20.1%	1.1%	1680
Arauca	45.6%	13.9%	19.8%	18.5%	2.2%	2693
Armenia	47.4%	14.8%	19.0%	17.1%	1.7%	2699
Atlántico	39.5%	16.9%	21.4%	19.8%	2.4%	5754
Barrancabermeja	47.3%	15.0%	18.6%	17.5%	1.6%	2577
Barranquilla	48.4%	14.7%	18.6%	16.5%	1.8%	11975
Bello	48.9%	13.8%	18.7%	16.3%	2.4%	3913
Bogotá, D.C.	55.9%	12.9%	16.7%	12.6%	1.9%	66042
Bolívar	31.6%	17.4%	23.5%	24.0%	3.5%	10443
Boyacá	49.9%	13.5%	18.7%	16.1%	1.8%	9417
Bucaramanga	57.3%	12.4%	16.5%	11.9%	2.0%	5470
Buenaventura	44.9%	14.4%	18.7%	18.9%	3.0%	3465
Buga	47.8%	14.6%	18.4%	15.9%	3.2%	1155
Caldas	46.3%	15.3%	19.0%	17.5%	2.0%	5757
Cali	51.4%	13.7%	17.4%	14.7%	2.8%	18791
Caquetá	43.8%	14.7%	20.5%	17.4%	3.7%	3275
Cartagena	44.6%	14.9%	20.1%	17.9%	2.6%	10845
Cartago	47.5%	14.9%	18.5%	16.2%	2.9%	1125
Casanare	42.1%	15.6%	21.6%	17.6%	3.1%	2969
Cauca	46.1%	14.3%	17.7%	17.4%	4.5%	12305
Cesar	39.7%	15.3%	21.6%	21.3%	2.2%	8248
Chocó	31.6%	16.8%	21.4%	25.0%	5.2%	3825
Chía	55.3%	13.6%	17.3%	12.8%	1.0%	1326
Ciénaga	36.6%	16.6%	22.2%	20.1%	4.6%	1361
Cundinamarca	51.5%	13.9%	17.9%	14.4%	2.3%	16079
Córdoba	34.8%	16.3%	23.1%	23.4%	2.4%	13337
Cúcuta	49.9%	14.4%	19.2%	15.4%	1.1%	7496
Dosquebradas	51.6%	14.5%	17.7%	14.8%	1.3%	1718
Duitama	59.3%	15.2%	15.6%	9.2%	0.8%	1259
Envigado	59.7%	11.5%	14.8%	13.3%	0.7%	1435
Facatativá	52.9%	13.3%	17.7%	15.1%	1.0%	1342
Florencia	41.4%	16.7%	20.9%	19.6%	1.4%	1996
Floridablanca	58.2%	12.2%	15.7%	12.7%	1.2%	2565
Fusagasugá	51.2%	14.8%	18.3%	14.8%	0.9%	1396
Girardot	39.6%	17.8%	21.1%	19.4%	2.1%	990
Girón	48.4%	14.8%	19.2%	15.5%	2.1%	1355

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## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Guainía	35.3%	16.5%	24.4%	19.6%	4.2%	504
Guaviare	38.5%	15.2%	21.7%	21.2%	3.4%	821
Huila	46.7%	14.0%	19.7%	18.2%	1.5%	8363
Ibagué	51.5%	13.5%	17.9%	15.2%	1.9%	5169
Ipiales	56.3%	11.4%	16.9%	13.9%	1.5%	1298
Itagüí	42.5%	15.9%	20.2%	19.6%	1.8%	1820
Jamundí	42.1%	15.5%	20.1%	20.6%	1.7%	1113
La Guajira	36.9%	16.4%	22.3%	21.8%	2.6%	3445
Lorica	37.0%	15.6%	21.7%	23.3%	2.4%	1487
Magangué	31.9%	15.5%	24.4%	24.6%	3.5%	1440
Magdalena	34.3%	16.0%	22.8%	22.8%	4.1%	8792
Maicao	34.7%	16.7%	25.1%	21.8%	1.8%	2063
Malambo	48.6%	14.1%	18.3%	16.0%	2.9%	1323
Manizales	54.0%	13.9%	16.4%	14.3%	1.3%	3033
Medellín	41.4%	16.3%	20.8%	19.3%	2.2%	20127
Meta	42.7%	15.4%	20.4%	18.3%	3.2%	5660
Montería	39.4%	16.1%	22.1%	20.7%	1.8%	5224
Mosquera	55.8%	13.9%	18.1%	11.2%	0.9%	1180
Nariño	53.4%	12.9%	16.6%	14.6%	2.4%	9260
Neiva	46.7%	15.0%	20.5%	16.3%	1.5%	3792
Norte de Santander	50.1%	13.6%	18.1%	16.3%	2.0%	7570
Palmira	52.8%	13.1%	18.1%	14.3%	1.8%	2806
Pasto	53.9%	14.1%	16.6%	13.7%	1.6%	4302
Pereira	50.3%	13.6%	18.5%	15.5%	2.0%	4556
Piedecuesta	51.0%	13.0%	19.3%	15.3%	1.3%	1479
Pitalito	45.6%	15.0%	19.5%	18.4%	1.5%	1677
Popayán	53.2%	12.6%	18.7%	13.3%	2.3%	2769
Putumayo	42.7%	15.0%	20.8%	17.8%	3.7%	4103
Quibdó	37.8%	16.3%	20.6%	21.0%	4.3%	1464
Quindío	41.1%	16.1%	21.2%	19.3%	2.3%	2675
Riohacha	38.8%	15.7%	21.6%	21.3%	2.5%	2510
Rionegro	53.0%	13.3%	18.7%	13.8%	1.1%	1163
Risaralda	46.5%	14.8%	18.7%	17.8%	2.3%	2976
Sabaneta	50.4%	14.1%	13.9%	13.6%	8.1%	568
Sahagún	43.6%	13.2%	20.8%	21.1%	1.3%	1250
San Andrés	37.5%	16.8%	22.4%	21.5%	1.9%	483
Santa Marta	45.3%	15.3%	19.3%	17.7%	2.4%	5685
Santander	52.5%	12.8%	17.8%	15.8%	1.1%	8527
Sincelejo	42.1%	14.7%	20.9%	19.7%	2.6%	3151
Soacha	51.9%	13.4%	17.9%	15.2%	1.6%	5303

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ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Sogamoso	52.0%	13.9%	16.2%	14.2%	3.7%	1529
Soledad	51.9%	13.8%	17.3%	15.3%	1.7%	5389
Sucre	36.4%	16.4%	22.8%	22.5%	2.0%	7453
Tolima	43.7%	14.6%	20.4%	18.8%	2.4%	9821
Tuluá	50.7%	13.6%	17.6%	16.6%	1.5%	2187
Tumaco	30.5%	18.1%	22.7%	23.1%	5.7%	2677
Tunja	57.5%	11.9%	16.8%	12.7%	1.2%	1705
Turbo	28.2%	19.8%	23.8%	24.6%	3.7%	1698
Uribe	28.8%	17.0%	25.7%	22.5%	6.0%	987
Valle del Cauca	44.5%	14.7%	20.2%	18.4%	2.3%	9044
Valledupar	47.4%	12.7%	17.6%	17.4%	4.9%	5252
Vaupés	23.9%	19.3%	26.5%	23.1%	7.1%	238
Vichada	45.0%	14.0%	19.7%	18.8%	2.6%	351
Villavicencio	52.3%	14.2%	17.9%	13.8%	1.8%	5502
Yopal	48.2%	14.3%	19.7%	16.0%	1.6%	1833
Zipaquirá	58.8%	12.2%	14.2%	13.3%	1.4%	1373
Colombia	46.8%	14.5%	19.2%	17.1%	2.4%	484612

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 21.**

La profesora de matemáticas está dictándoles a sus estudiantes para que ellos escriban en sus cuadernos.

Ella dice: “Cuatro más tres es mayor que dos menos uno”.

Los estudiantes deben escribir en sus cuadernos:

- A.  $4 + 3 > 2 - 1$
- B.  $4 + 3 + 2 - 1$
- C.  $4 + 3 = 2 - 1$
- D.  $4 + 3 < 2 - 1$

• **Estructura**

<b>Competencia</b>	Comunicación
<b>Componente</b>	Númérico - variacional
<b>Afirmación</b>	Traducir relaciones numéricas expresadas gráfica y simbólicamente.
<b>Nivel de desempeño</b>	Mínimo
<b>Respuesta Correcta</b>	A

• **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	49.8%	19.3%	12.8%	16.6%	1.5%	857
Antioquia	59.5%	11.5%	9.5%	16.4%	3.1%	27715
Apartadó	59.3%	13.0%	10.7%	16.4%	0.6%	1680
Arauca	59.9%	10.8%	7.8%	19.8%	1.6%	2693
Armenia	65.3%	9.5%	7.1%	16.8%	1.3%	2699
Atlántico	57.6%	15.7%	10.7%	14.4%	1.7%	5751
Barrancabermeja	64.8%	10.0%	7.7%	16.7%	0.7%	2577
Barranquilla	62.6%	11.4%	8.1%	16.8%	1.1%	11976
Bello	64.7%	9.0%	7.1%	17.7%	1.5%	3910
Bogotá, D.C.	66.3%	7.2%	6.2%	19.2%	1.1%	66037
Bolívar	50.9%	18.5%	14.0%	14.5%	2.2%	10443
Boyacá	62.7%	9.5%	7.6%	19.1%	1.0%	9413
Bucaramanga	68.4%	6.7%	5.6%	18.1%	1.2%	5472
Buenaventura	61.0%	13.6%	9.8%	13.6%	2.0%	3465
Buga	62.6%	7.9%	7.1%	19.4%	3.0%	1156
Caldas	63.9%	9.8%	7.8%	16.9%	1.5%	5759

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ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Cali	65.1%	8.8%	6.8%	17.2%	2.1%	18794
Caquetá	58.6%	12.6%	10.5%	15.7%	2.6%	3276
Cartagena	62.1%	12.6%	9.5%	14.3%	1.5%	10851
Cartago	68.6%	6.9%	5.7%	16.4%	2.4%	1127
Casanare	57.9%	11.3%	9.1%	19.7%	2.1%	2966
Cauca	65.3%	10.4%	7.6%	13.1%	3.6%	12305
Cesar	57.6%	14.8%	12.0%	14.1%	1.5%	8244
Chocó	58.8%	14.2%	9.3%	14.0%	3.7%	3821
Chía	67.4%	5.7%	6.0%	20.5%	0.4%	1324
Ciénaga	56.2%	14.9%	12.6%	14.5%	1.8%	1362
Cundinamarca	65.3%	7.6%	6.2%	19.1%	1.7%	16080
Córdoba	54.9%	16.2%	12.2%	15.2%	1.5%	13338
Cúcuta	67.0%	7.9%	5.9%	18.8%	0.5%	7496
Dosquebradas	65.6%	7.4%	7.4%	18.7%	0.9%	1719
Duitama	74.1%	3.7%	4.4%	17.0%	0.7%	1261
Envigado	72.9%	3.0%	5.2%	18.6%	0.2%	1433
Facatativá	63.3%	6.4%	7.1%	22.6%	0.6%	1342
Florencia	60.6%	12.4%	9.4%	16.9%	0.8%	1996
Floridablanca	70.8%	5.5%	5.1%	18.0%	0.6%	2565
Fusagasugá	65.3%	7.2%	6.9%	20.1%	0.5%	1396
Girardot	58.0%	14.6%	9.5%	16.9%	1.0%	992
Girón	61.6%	10.1%	6.8%	19.6%	1.9%	1355
Guainía	51.8%	18.2%	10.3%	16.6%	3.2%	506
Guaviare	60.0%	14.9%	7.3%	15.8%	2.1%	819
Huila	61.8%	11.5%	8.5%	17.2%	1.1%	8363
Ibagué	66.5%	8.2%	6.0%	18.5%	0.9%	5165
Ipiales	73.8%	5.3%	3.2%	17.0%	0.7%	1294
Itagüí	63.7%	9.1%	6.9%	19.4%	1.0%	1818
Jamundí	62.9%	12.7%	9.1%	14.4%	0.9%	1115
La Guajira	55.4%	16.4%	11.2%	14.9%	2.1%	3449
Lorica	56.0%	16.5%	14.0%	12.2%	1.2%	1487
Magangué	54.4%	16.5%	12.2%	13.8%	3.2%	1438
Magdalena	55.1%	16.6%	12.3%	13.3%	2.8%	8795
Maicao	50.8%	16.2%	13.8%	18.2%	1.0%	2062
Malambo	66.9%	11.5%	9.5%	11.1%	1.0%	1323
Manizales	69.0%	6.2%	5.4%	18.6%	0.8%	3032
Medellín	62.0%	10.6%	8.4%	17.6%	1.4%	20130
Meta	59.2%	11.6%	9.1%	18.1%	2.1%	5657
Montería	58.2%	12.8%	10.6%	17.3%	1.1%	5225
Mosquera	65.8%	7.5%	6.2%	20.3%	0.2%	1182

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## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Nariño	67.6%	8.0%	6.7%	16.1%	1.6%	9264
Neiva	63.2%	9.2%	8.0%	18.9%	0.7%	3791
Norte de Santander	64.8%	8.8%	7.6%	17.6%	1.3%	7571
Palmira	67.0%	7.7%	6.8%	17.4%	1.1%	2804
Pasto	67.4%	6.4%	5.6%	19.8%	0.9%	4304
Pereira	66.4%	8.1%	6.6%	17.8%	1.0%	4557
Piedecuesta	68.6%	6.7%	5.9%	18.3%	0.5%	1480
Pitalito	61.5%	10.9%	7.7%	18.9%	1.0%	1682
Popayán	66.4%	7.4%	6.4%	18.4%	1.4%	2767
Putumayo	60.4%	10.7%	8.2%	18.1%	2.6%	4103
Quibdó	61.6%	11.0%	7.7%	16.6%	3.0%	1462
Quindío	59.6%	11.4%	8.6%	19.0%	1.5%	2674
Riohacha	56.4%	15.7%	9.8%	16.2%	2.0%	2508
Rionegro	66.5%	7.1%	5.4%	20.4%	0.6%	1163
Risaralda	64.4%	9.9%	8.2%	15.8%	1.7%	2974
Sabaneta	61.4%	7.0%	3.5%	20.8%	7.2%	568
Sahagún	61.6%	13.4%	11.0%	13.8%	0.2%	1250
San Andrés	53.3%	16.2%	10.6%	18.5%	1.5%	482
Santa Marta	61.6%	12.5%	9.4%	15.0%	1.5%	5685
Santander	66.6%	8.8%	7.0%	16.8%	0.8%	8530
Sincelejo	59.8%	13.8%	9.8%	14.6%	2.1%	3149
Soacha	63.6%	8.7%	7.3%	19.4%	1.1%	5303
Sogamoso	67.4%	5.4%	4.2%	19.8%	3.3%	1529
Soledad	65.5%	10.4%	7.7%	15.6%	0.8%	5391
Sucre	56.0%	17.1%	11.9%	13.7%	1.3%	7455
Tolima	60.2%	11.6%	9.9%	16.6%	1.7%	9818
Tuluá	66.5%	8.9%	6.7%	17.4%	0.5%	2185
Tumaco	52.6%	17.7%	11.8%	14.2%	3.7%	2675
Tunja	70.1%	5.5%	4.9%	18.9%	0.6%	1707
Turbo	47.5%	20.2%	15.6%	14.0%	2.7%	1695
Uribe	54.7%	16.0%	9.0%	18.3%	1.9%	985
Valle del Cauca	61.6%	11.3%	8.4%	17.0%	1.7%	9042
Valledupar	60.1%	11.7%	8.8%	15.5%	4.0%	5256
Vaupés	46.4%	16.7%	13.4%	22.6%	0.8%	239
Vichada	59.5%	12.3%	8.0%	19.4%	0.9%	351
Villavicencio	65.4%	8.7%	6.5%	18.6%	0.9%	5504
Yopal	64.3%	7.5%	7.4%	19.9%	0.9%	1835
Zipaquirá	70.3%	4.6%	5.4%	19.4%	0.3%	1374
Colombia	62.5%	10.6%	8.3%	17.1%	1.6%	484618

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 22.

Los asistentes a una fiesta se organizaron en 8 mesas y en cada una se ubicaron 6. ¿Con cuál de las siguientes operaciones se puede calcular el número de personas que asistió a la fiesta?

- A.  $8 + 6$
- B.  $8 \times 6$
- C.  $8 - 6$
- D.  $8 \div 6$

## • Estructura

<b>Competencia</b>	Comunicación
<b>Componente</b>	Númérico - variacional
<b>Afirmación</b>	Traducir relaciones numéricas expresadas gráfica y simbólicamente.
<b>Nivel de desempeño</b>	Mínimo
<b>Respuesta Correcta</b>	B

## • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	25.4%	47.3%	15.3%	9.9%	2.1%	857
Antioquia	19.4%	56.9%	8.8%	11.7%	3.2%	27715
Apartadó	23.1%	51.3%	11.5%	13.5%	0.6%	1680
Arauca	20.2%	60.7%	9.6%	7.7%	1.8%	2693
Armenia	19.5%	57.6%	9.6%	12.0%	1.4%	2699
Atlántico	21.6%	53.4%	11.9%	11.1%	2.0%	5751
Barrancabermeja	19.9%	58.6%	9.9%	10.3%	1.2%	2577
Barranquilla	22.2%	57.4%	8.8%	10.3%	1.3%	11976
Bello	18.7%	56.7%	8.0%	14.9%	1.7%	3910
Bogotá, D.C.	16.2%	64.3%	6.7%	11.6%	1.1%	66037
Bolívar	24.2%	49.0%	13.5%	10.9%	2.4%	10443
Boyacá	18.8%	64.0%	6.7%	9.3%	1.2%	9413
Bucaramanga	16.9%	64.6%	7.5%	9.7%	1.2%	5472
Buenaventura	22.3%	54.9%	10.8%	9.8%	2.3%	3465
Buga	18.0%	57.1%	9.0%	12.8%	3.1%	1156
Caldas	19.0%	60.7%	8.6%	10.2%	1.5%	5759

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## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Cali	18.9%	59.4%	8.1%	11.2%	2.4%	18794
Caquetá	20.3%	57.9%	8.8%	10.2%	2.7%	3276
Cartagena	21.6%	55.7%	10.3%	10.4%	2.0%	10851
Cartago	17.9%	58.7%	9.2%	11.7%	2.5%	1127
Casanare	20.8%	59.2%	8.9%	8.8%	2.2%	2966
Cauca	17.8%	61.2%	8.8%	8.5%	3.8%	12305
Cesar	21.9%	54.7%	11.5%	10.2%	1.7%	8244
Chocó	21.3%	50.7%	12.5%	11.6%	4.0%	3821
Chía	14.2%	66.2%	6.6%	12.8%	0.2%	1324
Ciénaga	20.9%	56.2%	11.5%	9.0%	2.5%	1362
Cundinamarca	16.5%	65.5%	6.6%	9.6%	1.9%	16080
Córdoba	23.3%	52.7%	12.0%	10.4%	1.7%	13338
Cúcuta	19.5%	61.5%	9.0%	9.4%	0.6%	7496
Dosquebradas	18.2%	62.8%	8.0%	9.9%	1.0%	1719
Duitama	12.5%	72.2%	4.6%	10.0%	0.8%	1261
Envigado	10.9%	70.5%	5.3%	13.0%	0.3%	1433
Facatativá	18.6%	64.2%	5.3%	11.7%	0.2%	1342
Florencia	21.3%	59.5%	9.2%	9.2%	0.9%	1996
Floridablanca	16.2%	67.2%	6.5%	9.6%	0.5%	2565
Fusagasugá	19.2%	61.7%	6.4%	11.8%	0.8%	1396
Girardot	21.4%	53.0%	13.5%	10.8%	1.3%	992
Girón	19.7%	59.8%	9.2%	9.5%	1.8%	1355
Guainía	21.5%	50.6%	13.0%	11.3%	3.6%	506
Guaviare	19.7%	56.2%	10.9%	10.9%	2.4%	819
Huila	20.4%	60.7%	7.7%	9.8%	1.3%	8363
Ibagué	17.0%	64.4%	8.1%	9.5%	1.0%	5165
Ipiales	14.1%	64.2%	7.5%	13.1%	1.0%	1294
Itagüí	17.8%	57.0%	11.1%	13.0%	1.2%	1818
Jamundí	20.9%	55.1%	9.5%	13.6%	0.9%	1115
La Guajira	21.6%	54.0%	11.5%	10.6%	2.2%	3449
Lorica	24.6%	51.1%	11.6%	10.4%	2.3%	1487
Magangué	25.8%	51.4%	10.5%	9.2%	3.1%	1438
Magdalena	21.0%	52.2%	13.4%	10.4%	3.0%	8795
Maicao	25.3%	50.6%	12.4%	10.6%	1.1%	2062
Malambo	21.4%	59.5%	8.7%	9.1%	1.4%	1323
Manizales	16.4%	64.0%	7.3%	11.5%	0.9%	3032
Medellín	18.0%	56.5%	9.9%	14.0%	1.6%	20130
Meta	20.0%	59.5%	8.7%	9.6%	2.2%	5657
Montería	24.3%	53.1%	11.0%	10.3%	1.3%	5225
Mosquera	15.7%	63.4%	7.4%	13.1%	0.4%	1182

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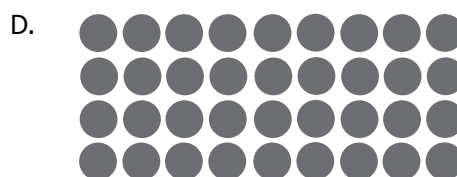
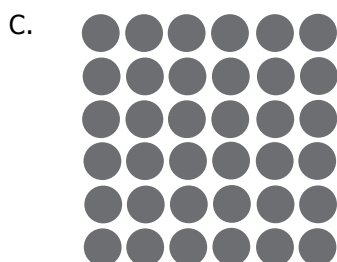
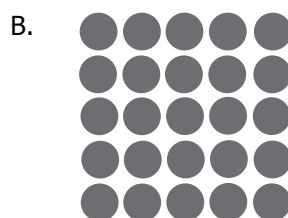
ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Nariño	17.8%	63.8%	6.9%	9.8%	1.6%	9264
Neiva	20.4%	60.8%	8.1%	9.9%	0.8%	3791
Norte de Santander	19.0%	62.7%	7.9%	9.0%	1.4%	7571
Palmira	17.7%	61.3%	9.1%	10.6%	1.3%	2804
Pasto	16.5%	62.8%	7.0%	12.7%	0.9%	4304
Pereira	18.2%	60.0%	8.3%	12.3%	1.2%	4557
Piedecuesta	16.4%	65.7%	8.9%	8.4%	0.7%	1480
Pitalito	19.1%	61.5%	7.7%	10.6%	1.1%	1682
Popayán	17.5%	63.6%	7.4%	9.7%	1.8%	2767
Putumayo	20.1%	56.2%	9.7%	11.1%	2.9%	4103
Quibdó	21.1%	53.8%	11.4%	10.7%	3.0%	1462
Quindío	22.4%	54.2%	9.1%	12.8%	1.4%	2674
Riohacha	24.4%	52.3%	11.8%	9.7%	1.8%	2508
Rionegro	16.5%	64.7%	6.3%	12.0%	0.4%	1163
Risaralda	20.5%	59.8%	8.2%	9.9%	1.6%	2974
Sabaneta	13.6%	63.2%	5.6%	10.4%	7.2%	568
Sahagún	23.0%	57.5%	8.8%	10.0%	0.6%	1250
San Andrés	25.9%	46.5%	14.3%	11.6%	1.7%	482
Santa Marta	22.5%	54.8%	10.2%	10.7%	1.7%	5685
Santander	17.4%	66.0%	7.2%	8.6%	0.8%	8530
Sincelejo	24.1%	54.4%	9.4%	9.8%	2.3%	3149
Soacha	20.3%	59.2%	8.5%	11.0%	1.1%	5303
Sogamoso	15.3%	65.7%	6.1%	9.5%	3.5%	1529
Soledad	20.2%	60.5%	8.4%	9.9%	1.0%	5391
Sucre	22.7%	53.1%	12.6%	10.0%	1.6%	7455
Tolima	19.7%	60.4%	9.3%	8.7%	1.8%	9818
Tuluá	18.9%	60.9%	8.9%	10.4%	0.9%	2185
Tumaco	23.1%	46.2%	15.6%	10.8%	4.3%	2675
Tunja	14.4%	66.8%	7.0%	11.2%	0.5%	1707
Turbo	24.4%	45.4%	15.8%	11.2%	3.2%	1695
Uribe	21.1%	46.6%	16.1%	13.2%	2.9%	985
Valle del Cauca	19.4%	58.9%	8.9%	11.0%	1.8%	9042
Valledupar	21.9%	55.3%	9.5%	9.1%	4.3%	5256
Vaupés	27.6%	49.0%	11.7%	10.5%	1.3%	239
Vichada	23.9%	57.5%	8.0%	10.3%	0.3%	351
Villavicencio	17.6%	62.8%	7.9%	10.7%	0.9%	5504
Yopal	18.7%	62.0%	8.2%	10.1%	1.0%	1835
Zipaquirá	17.6%	66.3%	6.6%	8.9%	0.7%	1374
Colombia	19.3%	59.3%	8.9%	10.7%	1.8%	484618

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 23.**

Hugo tiene 36 canicas. Él las organizó varias veces formando filas y columnas con la misma cantidad de canicas cada una, sin que le sobrara o faltara alguna.

¿Cuál de las siguientes figuras **NO** corresponde a una de las maneras en que Hugo organizó las canicas?



• **Estructura**

<b>Competencia</b>	Resolución
<b>Componente</b>	Númerico - variacional
<b>Afirmación</b>	Resolver y formular problemas multiplicativos rutinarios y no rutinarios de adición repetida, factor multiplicante, razón y producto cartesiano.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	B



## • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	23.3%	42.2%	22.8%	10.0%	1.6%	857
Antioquia	19.8%	53.1%	15.7%	7.9%	3.4%	27715
Apartadó	21.3%	47.9%	20.5%	9.3%	1.0%	1680
Arauca	20.2%	52.4%	16.0%	9.5%	2.0%	2693
Armenia	19.1%	55.4%	15.2%	8.8%	1.5%	2699
Atlántico	21.9%	45.0%	20.2%	10.8%	2.0%	5751
Barrancabermeja	20.7%	52.0%	16.5%	9.3%	1.6%	2577
Barranquilla	20.7%	52.4%	16.6%	8.7%	1.5%	11976
Bello	21.1%	55.5%	13.6%	8.0%	1.8%	3910
Bogotá, D.C.	18.5%	59.0%	14.0%	7.3%	1.2%	66037
Bolívar	22.6%	42.8%	20.4%	11.6%	2.7%	10443
Boyacá	18.8%	57.4%	15.0%	7.5%	1.3%	9413
Bucaramanga	16.9%	60.1%	14.1%	7.4%	1.4%	5472
Buenaventura	19.5%	49.9%	19.7%	8.5%	2.5%	3465
Buga	17.6%	53.5%	17.6%	8.5%	2.9%	1156
Caldas	17.9%	57.3%	14.9%	8.3%	1.6%	5759
Cali	19.1%	55.9%	14.6%	7.9%	2.4%	18794
Caquetá	20.7%	49.6%	18.1%	8.9%	2.6%	3276
Cartagena	21.3%	48.5%	18.4%	9.7%	2.1%	10851
Cartago	21.1%	51.8%	16.5%	7.5%	3.0%	1127
Casanare	20.0%	54.2%	15.4%	8.1%	2.3%	2966
Cauca	18.0%	51.5%	17.7%	8.6%	4.1%	12305
Cesar	19.1%	50.2%	18.8%	10.0%	1.9%	8244
Chocó	20.4%	43.9%	20.8%	10.8%	4.1%	3821
Chía	18.1%	61.6%	13.2%	6.7%	0.5%	1324
Ciénaga	21.9%	45.7%	18.3%	10.6%	3.6%	1362
Cundinamarca	18.4%	57.6%	14.6%	7.3%	2.1%	16080
Córdoba	22.3%	46.3%	18.7%	10.5%	2.2%	13338
Cúcuta	18.8%	56.2%	16.3%	7.9%	0.9%	7496
Dosquebradas	18.3%	58.1%	14.4%	8.3%	1.0%	1719
Duitama	16.7%	64.6%	11.7%	6.0%	1.0%	1261
Envigado	17.4%	62.2%	11.9%	7.9%	0.7%	1433
Facatativá	18.3%	59.3%	14.3%	7.2%	0.9%	1342
Florencia	18.8%	53.7%	17.4%	9.0%	1.1%	1996
Floridablanca	17.6%	62.0%	13.5%	6.2%	0.7%	2565
Fusagasugá	18.3%	55.9%	16.7%	8.0%	1.1%	1396
Girardot	23.2%	45.9%	20.0%	9.8%	1.2%	992
Girón	18.4%	56.8%	15.1%	7.8%	1.9%	1355

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## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Guainía	23.9%	38.9%	20.2%	13.4%	3.6%	506
Guaviare	20.3%	50.2%	17.2%	9.8%	2.6%	819
Huila	19.0%	56.2%	15.6%	7.7%	1.4%	8363
Ibagué	17.8%	58.3%	15.0%	7.5%	1.3%	5165
Ipiales	14.3%	64.7%	12.4%	7.7%	0.9%	1294
Itagüí	19.9%	54.3%	15.0%	9.2%	1.5%	1818
Jamundí	20.0%	53.3%	16.9%	9.1%	0.8%	1115
La Guajira	20.7%	46.6%	20.0%	10.4%	2.3%	3449
Lorica	20.6%	45.5%	18.3%	13.0%	2.6%	1487
Magangué	19.4%	47.6%	19.9%	9.9%	3.2%	1438
Magdalena	22.3%	43.0%	20.7%	10.6%	3.4%	8795
Maicao	22.8%	42.4%	22.4%	10.8%	1.7%	2062
Malambo	18.3%	56.9%	14.9%	8.6%	1.3%	1323
Manizales	17.0%	61.1%	13.5%	7.7%	0.8%	3032
Medellín	21.1%	51.5%	16.6%	9.0%	1.7%	20130
Meta	19.3%	52.1%	16.8%	9.3%	2.4%	5657
Montería	22.1%	49.7%	17.7%	8.8%	1.6%	5225
Mosquera	18.8%	60.2%	13.7%	7.1%	0.3%	1182
Nariño	16.2%	59.6%	15.6%	6.7%	1.8%	9264
Neiva	20.3%	52.8%	17.3%	8.5%	1.0%	3791
Norte de Santander	17.7%	55.2%	17.4%	8.2%	1.5%	7571
Palmira	17.6%	57.0%	15.9%	8.2%	1.4%	2804
Pasto	18.2%	59.9%	14.4%	6.5%	1.0%	4304
Pereira	18.3%	58.2%	14.2%	7.7%	1.6%	4557
Piedecuesta	16.6%	60.7%	14.3%	7.7%	0.7%	1480
Pitalito	19.6%	57.0%	14.6%	7.7%	1.1%	1682
Popayán	17.9%	56.2%	16.5%	7.8%	1.6%	2767
Putumayo	19.1%	52.9%	17.4%	7.9%	2.8%	4103
Quibdó	22.4%	47.2%	17.2%	9.8%	3.4%	1462
Quindío	20.4%	53.7%	14.8%	9.4%	1.6%	2674
Riohacha	22.0%	45.8%	20.0%	10.0%	2.2%	2508
Rionegro	19.5%	60.6%	13.0%	6.3%	0.6%	1163
Risaralda	19.7%	54.0%	16.6%	7.8%	1.8%	2974
Sabaneta	15.5%	58.5%	11.6%	6.9%	7.6%	568
Sahagún	21.4%	53.3%	15.4%	9.5%	0.3%	1250
San Andrés	22.4%	46.7%	17.2%	12.4%	1.2%	482
Santa Marta	21.6%	49.7%	16.9%	9.6%	2.3%	5685
Santander	18.5%	57.0%	15.8%	7.6%	1.0%	8530
Sincelejo	20.7%	52.0%	15.8%	9.0%	2.5%	3149
Soacha	20.0%	55.1%	15.5%	8.2%	1.2%	5303

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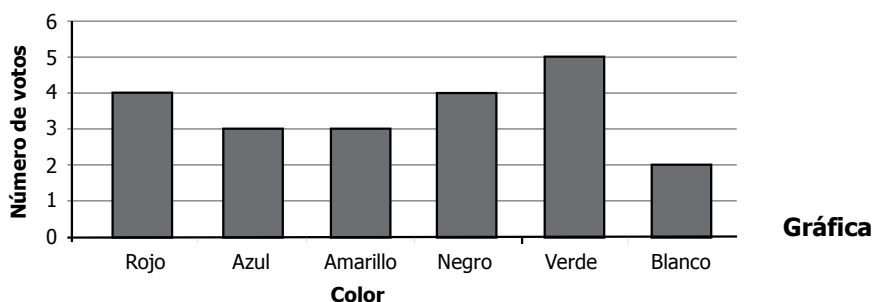
ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Sogamoso	18.7%	57.3%	14.7%	6.0%	3.4%	1529
Soledad	20.2%	52.7%	17.2%	8.6%	1.2%	5391
Sucre	22.1%	46.0%	19.8%	10.4%	1.8%	7455
Tolima	19.7%	52.0%	17.3%	9.1%	1.8%	9818
Tuluá	20.2%	56.8%	15.3%	7.0%	0.7%	2185
Tumaco	21.6%	41.8%	21.6%	10.7%	4.3%	2675
Tunja	19.4%	60.0%	12.8%	7.3%	0.5%	1707
Turbo	25.1%	39.7%	20.8%	11.3%	3.2%	1695
Uribe	25.5%	31.8%	26.0%	14.0%	2.7%	985
Valle del Cauca	19.9%	53.5%	16.5%	8.3%	1.8%	9042
Valledupar	20.3%	50.0%	16.4%	8.9%	4.4%	5256
Vaupés	19.2%	41.8%	24.7%	12.6%	1.7%	239
Vichada	20.8%	47.9%	20.8%	9.4%	1.1%	351
Villavicencio	19.2%	56.8%	14.9%	8.0%	1.1%	5504
Yopal	17.1%	59.6%	13.8%	8.4%	1.1%	1835
Zipaquirá	16.4%	64.0%	12.1%	7.1%	0.5%	1374
Colombia	19.6%	53.7%	16.3%	8.5%	1.9%	484618

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 24.**

Para elegir los tres colores de su nuevo uniforme, las integrantes de un equipo de porristas realizaron una votación.

En la gráfica aparecen los resultados de la votación.



Seleccionaron el color que tuvo mayor número de votos y los dos colores que obtuvieron 1 voto menos que aquel. ¿Cuáles son los colores del nuevo uniforme?

- A. Rojo, azul y amarillo.
- B. Negro, azul y blanco.
- C. Verde, rojo y negro.
- D. Verde, negro y amarillo.

• **Estructura**

<b>Competencia</b>	Resolución
<b>Componente</b>	Aleatorio
<b>Afirmación</b>	Resolver problemas que requieren encontrar y/o dar significado a la medida de tendencia central de un conjunto de datos.
<b>Nivel de desempeño</b>	Mínimo
<b>Respuesta Correcta</b>	C

• **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	8.8%	12.3%	65.3%	11.6%	2.1%	857
Antioquia	6.7%	6.2%	73.7%	10.0%	3.3%	27715
Apartadó	8.0%	6.4%	74.4%	10.4%	0.8%	1680
Arauca	5.5%	5.7%	76.8%	10.2%	1.8%	2693

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Armenia	5.5%	4.7%	78.5%	9.9%	1.3%	2699
Atlántico	7.7%	8.1%	69.6%	12.4%	2.1%	5751
Barrancabermeja	5.8%	6.8%	75.2%	11.0%	1.2%	2577
Barranquilla	5.9%	5.8%	77.1%	9.8%	1.4%	11976
Bello	4.4%	5.4%	79.5%	9.0%	1.6%	3910
Bogotá, D.C.	3.9%	3.8%	81.9%	9.1%	1.2%	66037
Bolívar	9.6%	9.4%	65.7%	12.4%	2.9%	10443
Boyacá	5.7%	5.4%	77.2%	10.4%	1.3%	9413
Bucaramanga	4.1%	4.1%	81.5%	9.1%	1.2%	5472
Buenaventura	9.8%	7.7%	70.6%	9.3%	2.6%	3465
Buga	5.8%	6.1%	74.9%	9.8%	3.4%	1156
Caldas	6.3%	5.9%	74.4%	11.7%	1.6%	5759
Cali	4.9%	5.2%	78.0%	9.6%	2.3%	18794
Caquetá	8.6%	7.4%	70.7%	10.5%	2.8%	3276
Cartagena	7.1%	7.6%	73.2%	10.1%	2.1%	10851
Cartago	5.0%	6.9%	74.7%	10.5%	2.9%	1127
Casanare	5.1%	6.7%	75.6%	10.2%	2.4%	2966
Cauca	7.8%	7.3%	70.8%	10.1%	4.0%	12305
Cesar	8.8%	9.4%	68.4%	11.8%	1.7%	8244
Chocó	11.9%	10.4%	61.4%	12.0%	4.2%	3821
Chía	3.1%	4.2%	84.5%	8.0%	0.2%	1324
Ciénaga	8.1%	7.7%	70.3%	11.2%	2.6%	1362
Cundinamarca	4.8%	4.8%	78.8%	9.7%	1.9%	16080
Córdoba	8.7%	8.4%	69.7%	11.1%	2.1%	13338
Cúcuta	5.0%	4.9%	80.2%	9.3%	0.6%	7496
Dosquebradas	4.3%	4.2%	81.2%	9.5%	0.8%	1719
Duitama	2.9%	2.9%	83.0%	10.3%	1.0%	1261
Envigado	3.6%	3.9%	84.0%	8.1%	0.4%	1433
Facatativá	3.2%	3.9%	83.3%	9.0%	0.5%	1342
Florencia	5.1%	5.7%	78.1%	9.9%	1.2%	1996
Floridablanca	3.8%	4.9%	82.3%	8.4%	0.6%	2565
Fusagasugá	5.7%	3.9%	79.2%	10.7%	0.5%	1396
Girardot	6.1%	5.5%	73.7%	13.3%	1.3%	992
Girón	4.1%	5.0%	79.3%	9.9%	1.8%	1355
Guainía	11.1%	6.7%	66.4%	11.3%	4.5%	506
Guaviare	7.9%	8.1%	69.5%	11.6%	2.9%	819
Huila	5.6%	5.2%	77.0%	10.8%	1.4%	8363
Ibagué	4.4%	4.8%	80.1%	9.6%	1.1%	5165
Ipiales	4.5%	4.8%	78.4%	11.4%	0.9%	1294
Itagüí	7.2%	7.8%	73.8%	10.0%	1.3%	1818

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## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Jamundí	6.2%	6.5%	76.7%	9.7%	1.0%	1115
La Guajira	9.3%	10.2%	66.5%	11.5%	2.5%	3449
Lorica	8.1%	8.5%	68.9%	11.9%	2.7%	1487
Magangué	8.1%	5.6%	69.9%	12.8%	3.7%	1438
Magdalena	11.0%	8.9%	64.5%	12.1%	3.4%	8795
Maicao	9.3%	8.5%	68.6%	11.8%	1.7%	2062
Malambo	6.6%	5.3%	76.9%	9.9%	1.4%	1323
Manizales	3.7%	4.6%	81.6%	9.2%	0.9%	3032
Medellín	5.7%	6.8%	74.8%	11.0%	1.7%	20130
Meta	5.9%	5.8%	76.5%	9.6%	2.2%	5657
Montería	6.7%	6.6%	74.0%	11.1%	1.6%	5225
Mosquera	3.8%	3.6%	83.3%	8.8%	0.4%	1182
Nariño	6.8%	6.2%	75.4%	9.9%	1.7%	9264
Neiva	4.4%	5.5%	79.1%	10.1%	1.0%	3791
Norte de Santander	5.9%	5.6%	77.1%	10.0%	1.4%	7571
Palmira	4.9%	5.7%	78.9%	9.2%	1.4%	2804
Pasto	4.9%	5.1%	79.9%	9.2%	0.9%	4304
Pereira	4.4%	4.5%	80.1%	9.7%	1.3%	4557
Piedecuesta	4.2%	4.5%	80.7%	10.1%	0.5%	1480
Pitalito	5.2%	5.8%	77.6%	10.0%	1.3%	1682
Popayán	4.0%	4.0%	80.4%	9.9%	1.7%	2767
Putumayo	7.0%	6.6%	74.5%	9.2%	2.7%	4103
Quibdó	7.9%	8.9%	67.9%	12.0%	3.4%	1462
Quindío	5.7%	7.1%	74.8%	11.1%	1.2%	2674
Riohacha	8.9%	8.3%	67.6%	13.0%	2.2%	2508
Rionegro	3.4%	5.4%	80.6%	9.6%	0.9%	1163
Risaralda	5.4%	6.0%	76.5%	10.4%	1.7%	2974
Sabaneta	4.8%	5.6%	73.6%	8.6%	7.4%	568
Sahagún	7.0%	6.6%	74.9%	11.0%	0.4%	1250
San Andrés	6.8%	10.4%	68.0%	13.7%	1.0%	482
Santa Marta	7.2%	6.7%	74.1%	10.1%	1.9%	5685
Santander	5.5%	5.4%	77.5%	10.7%	0.9%	8530
Sincelejo	6.5%	6.3%	74.9%	9.7%	2.6%	3149
Soacha	4.0%	4.5%	80.0%	10.2%	1.3%	5303
Sogamoso	3.8%	4.1%	80.1%	8.6%	3.5%	1529
Soledad	6.6%	4.9%	77.6%	9.8%	1.2%	5391
Sucre	8.9%	8.0%	69.7%	11.6%	1.7%	7455
Tolima	6.1%	7.1%	74.3%	10.7%	1.9%	9818
Tuluá	4.8%	4.8%	79.5%	10.3%	0.7%	2185
Tumaco	12.1%	12.7%	58.1%	11.9%	5.2%	2675

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Tunja	3.8%	2.8%	82.5%	10.5%	0.4%	1707
Turbo	10.7%	9.4%	64.7%	12.1%	3.1%	1695
Uribe	14.2%	18.6%	51.0%	13.1%	3.1%	985
Valle del Cauca	5.1%	5.8%	77.1%	10.2%	1.8%	9042
Valledupar	6.4%	6.3%	73.0%	9.8%	4.4%	5256
Vaupés	7.9%	10.9%	66.1%	13.4%	1.7%	239
Vichada	6.3%	7.1%	76.1%	9.7%	0.9%	351
Villavicencio	4.4%	4.7%	80.3%	9.7%	1.0%	5504
Yopal	4.5%	6.1%	78.5%	9.9%	1.0%	1835
Zipaquirá	4.6%	4.4%	82.4%	8.2%	0.4%	1374
Colombia	6.1%	6.1%	75.8%	10.2%	1.9%	484618

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 25.**

Una profesora organizó 6 grupos de 7 estudiantes para realizar una actividad recreativa. ¿Con cuál de las siguientes operaciones se puede determinar cuántos estudiantes participaron en la actividad?

- A.  $7 + 7 + 7 + 7 + 7 + 7$
- B.  $1 + 2 + 3 + 4 + 5 + 6$
- C.  $6 + 6 + 6 + 6 + 6 + 6$
- D.  $1 + 2 + 3 + 4 + 5 + 6 + 7$

• **Estructura**

<b>Competencia</b>	Resolución
<b>Componente</b>	Numérico - variacional
<b>Afirmación</b>	Resolver y formular problemas multiplicativos rutinarios y no rutinarios de adición repetida, factor multiplicante, razón y producto cartesiano.
<b>Nivel de desempeño</b>	Mínimo
<b>Respuesta Correcta</b>	A

• **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	47.3%	15.8%	14.4%	20.2%	2.5%	857
Antioquia	61.0%	10.5%	10.1%	14.9%	3.5%	27715
Apartadó	57.3%	12.1%	11.4%	18.2%	1.0%	1680
Arauca	63.4%	10.7%	9.5%	14.2%	2.1%	2693
Armenia	63.8%	10.9%	9.7%	13.6%	1.9%	2699
Atlántico	57.2%	11.9%	11.3%	17.1%	2.6%	5751
Barrancabermeja	61.2%	10.9%	10.5%	15.6%	1.8%	2577
Barranquilla	64.8%	9.5%	9.8%	14.3%	1.5%	11976
Bello	66.5%	9.3%	9.5%	12.9%	1.9%	3910
Bogotá, D.C.	72.0%	7.9%	8.1%	10.6%	1.4%	66037
Bolívar	50.0%	14.0%	13.4%	19.5%	3.1%	10443
Boyacá	66.3%	9.6%	9.1%	13.7%	1.3%	9413
Bucaramanga	72.2%	7.9%	7.6%	10.8%	1.4%	5472
Buenaventura	57.3%	10.8%	10.6%	18.4%	2.8%	3465
Buga	62.6%	8.2%	9.0%	16.8%	3.4%	1156
Caldas	63.0%	10.0%	9.5%	15.7%	1.8%	5759



ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Cali	65.3%	10.1%	9.2%	12.7%	2.7%	18794
Caquetá	58.9%	12.4%	10.3%	15.4%	3.0%	3276
Cartagena	60.1%	10.8%	10.6%	16.2%	2.3%	10851
Cartago	61.8%	11.1%	9.6%	14.7%	2.8%	1127
Casanare	61.5%	9.9%	11.2%	14.9%	2.5%	2966
Cauca	62.0%	9.4%	10.1%	14.4%	4.2%	12305
Cesar	54.6%	12.9%	11.2%	19.1%	2.2%	8244
Chocó	51.0%	11.9%	12.8%	19.6%	4.7%	3821
Chía	75.5%	8.1%	6.6%	9.1%	0.7%	1324
Ciénaga	57.9%	13.0%	9.8%	16.1%	3.2%	1362
Cundinamarca	68.9%	8.9%	8.6%	11.6%	2.0%	16080
Córdoba	52.7%	12.5%	12.8%	19.7%	2.2%	13338
Cúcuta	67.6%	8.5%	9.3%	13.8%	0.8%	7496
Dosquebradas	68.6%	9.9%	8.2%	12.0%	1.2%	1719
Duitama	75.4%	6.4%	7.3%	10.0%	0.9%	1261
Envigado	79.2%	5.5%	7.3%	7.2%	0.8%	1433
Facatativá	70.0%	8.3%	8.1%	13.0%	0.5%	1342
Florencia	59.1%	12.7%	9.9%	16.9%	1.4%	1996
Floridablanca	74.6%	6.4%	8.7%	9.6%	0.8%	2565
Fusagasugá	66.4%	8.5%	10.7%	13.5%	1.0%	1396
Girardot	60.4%	12.0%	9.5%	16.4%	1.7%	992
Girón	68.2%	8.5%	8.2%	12.8%	2.4%	1355
Guainía	47.2%	15.4%	11.5%	21.7%	4.2%	506
Guaviare	56.8%	11.8%	11.2%	17.8%	2.3%	819
Huila	63.7%	10.2%	9.9%	14.7%	1.5%	8363
Ibagué	70.1%	8.6%	8.0%	11.8%	1.4%	5165
Ipiales	70.5%	9.0%	8.5%	10.9%	1.1%	1294
Itagüí	60.2%	11.9%	11.8%	14.4%	1.7%	1818
Jamundí	61.0%	10.2%	12.0%	15.5%	1.3%	1115
La Guajira	53.2%	12.3%	12.4%	19.2%	2.9%	3449
Lorica	51.1%	14.6%	12.1%	19.8%	2.4%	1487
Magangué	53.0%	12.6%	10.8%	19.6%	4.0%	1438
Magdalena	51.8%	12.7%	12.1%	19.9%	3.5%	8795
Maicao	51.5%	15.1%	13.1%	18.3%	1.9%	2062
Malambo	64.9%	9.0%	9.4%	14.7%	2.0%	1323
Manizales	70.1%	8.7%	8.4%	11.6%	1.2%	3032
Medellín	62.0%	11.4%	10.8%	13.9%	1.9%	20130
Meta	62.5%	10.5%	9.3%	15.2%	2.5%	5657
Montería	57.5%	12.0%	11.1%	17.9%	1.5%	5225
Mosquera	70.9%	7.7%	8.3%	12.5%	0.6%	1182

## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Nariño	68.6%	8.4%	9.0%	11.9%	2.1%	9264
Neiva	64.9%	10.5%	9.6%	14.1%	1.0%	3791
Norte de Santander	66.6%	9.3%	9.3%	13.3%	1.6%	7571
Palmira	67.2%	9.7%	9.7%	12.1%	1.3%	2804
Pasto	70.8%	8.1%	9.1%	10.9%	1.1%	4304
Pereira	67.2%	10.2%	8.5%	12.8%	1.3%	4557
Piedecuesta	70.5%	9.4%	7.8%	11.5%	0.9%	1480
Pitalito	65.6%	11.0%	10.0%	12.1%	1.2%	1682
Popayán	69.2%	7.8%	9.2%	12.1%	1.7%	2767
Putumayo	59.1%	12.1%	10.3%	15.5%	3.0%	4103
Quibdó	55.7%	11.4%	12.9%	16.3%	3.8%	1462
Quindío	59.1%	11.7%	11.1%	16.4%	1.7%	2674
Riohacha	55.3%	12.5%	10.9%	18.9%	2.3%	2508
Rionegro	70.2%	8.0%	9.5%	11.3%	1.0%	1163
Risaralda	63.8%	9.7%	9.9%	14.6%	2.0%	2974
Sabaneta	64.3%	7.7%	7.9%	12.0%	8.1%	568
Sahagún	61.3%	10.3%	10.3%	16.8%	1.3%	1250
San Andrés	51.5%	14.7%	14.5%	17.4%	1.9%	482
Santa Marta	59.1%	11.2%	10.7%	16.6%	2.3%	5685
Santander	67.6%	8.7%	8.9%	13.8%	1.0%	8530
Sincelejo	58.4%	11.6%	11.1%	16.1%	2.8%	3149
Soacha	67.4%	9.2%	9.6%	12.3%	1.5%	5303
Sogamoso	68.3%	8.7%	7.3%	12.0%	3.7%	1529
Soledad	66.4%	9.7%	9.0%	13.6%	1.2%	5391
Sucre	54.2%	12.9%	11.3%	19.4%	2.2%	7455
Tolima	61.0%	11.2%	10.3%	15.4%	2.0%	9818
Tuluá	66.2%	10.6%	9.1%	13.0%	1.2%	2185
Tumaco	46.7%	12.8%	14.7%	20.1%	5.6%	2675
Tunja	74.9%	8.3%	6.2%	10.0%	0.6%	1707
Turbo	47.8%	13.6%	14.6%	20.5%	3.5%	1695
Uribe	44.7%	15.1%	15.2%	20.8%	4.2%	985
Valle del Cauca	61.7%	11.2%	9.8%	15.2%	2.1%	9042
Valledupar	59.5%	10.3%	9.6%	16.1%	4.5%	5256
Vaupés	48.5%	15.9%	10.9%	22.6%	2.1%	239
Vichada	57.3%	13.1%	10.8%	17.9%	0.9%	351
Villavicencio	68.5%	8.4%	8.3%	13.7%	1.1%	5504
Yopal	65.5%	10.5%	8.7%	14.1%	1.3%	1835
Zipaquirá	71.5%	7.6%	8.1%	12.1%	0.8%	1374
Colombia	63.6%	10.1%	9.8%	14.4%	2.1%	484618

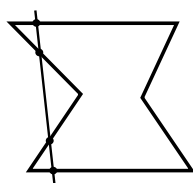
\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.



### • Pregunta 26.

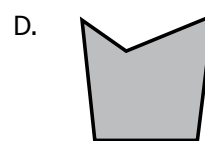
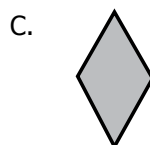
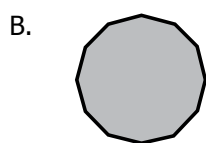
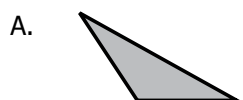
Un polígono es cóncavo si se puede dibujar alguna recta que corte al polígono en más de dos puntos.

Observa en la figura un ejemplo de polígono cóncavo.



**Figura**

¿Cuál de los siguientes polígonos es cóncavo también?



### • Estructura

<b>Competencia</b>	Razonamiento
<b>Componente</b>	Espacial - métrico
<b>Afirmación</b>	Comparar y clasificar objetos tridimensionales y figuras bidimensionales de acuerdo con sus componentes.
<b>Nivel de desempeño</b>	Mínimo
<b>Respuesta Correcta</b>	D

### • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	14.7%	12.3%	15.6%	55.9%	1.5%	857
Antioquia	13.6%	8.8%	10.9%	63.4%	3.4%	27715
Apartadó	13.7%	10.1%	12.9%	62.5%	0.8%	1680
Arauca	13.3%	9.3%	10.8%	64.7%	1.9%	2693
Armenia	12.9%	7.4%	8.8%	69.6%	1.3%	2699
Atlántico	13.5%	10.7%	12.0%	61.8%	1.9%	5751
Barrancabermeja	14.2%	9.8%	11.5%	63.0%	1.4%	2577

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## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Barranquilla	13.3%	7.9%	11.1%	66.4%	1.3%	11976
Bello	15.0%	7.7%	10.2%	65.5%	1.5%	3910
Bogotá, D.C.	12.8%	7.4%	9.3%	69.1%	1.4%	66037
Bolívar	14.4%	11.5%	14.0%	57.3%	2.9%	10443
Boyacá	12.2%	8.1%	10.7%	67.8%	1.3%	9413
Bucaramanga	11.6%	8.3%	9.1%	69.6%	1.3%	5472
Buenaventura	13.7%	9.1%	11.5%	62.9%	2.7%	3465
Buga	12.5%	8.4%	10.1%	65.7%	3.4%	1156
Caldas	13.5%	8.1%	10.8%	65.9%	1.6%	5759
Cali	13.4%	7.4%	10.2%	66.5%	2.5%	18794
Caquetá	14.0%	8.7%	11.2%	63.2%	2.8%	3276
Cartagena	13.6%	9.4%	11.3%	63.7%	2.0%	10851
Cartago	13.7%	8.5%	9.9%	65.4%	2.5%	1127
Casanare	13.1%	8.8%	11.6%	64.4%	2.2%	2966
Cauca	12.7%	9.0%	10.4%	63.8%	4.1%	12305
Cesar	13.8%	9.4%	12.7%	62.1%	2.0%	8244
Chocó	15.0%	12.1%	15.0%	53.6%	4.2%	3821
Chía	12.5%	6.5%	9.9%	70.6%	0.5%	1324
Ciénaga	12.6%	10.2%	12.4%	62.6%	2.3%	1362
Cundinamarca	11.1%	8.0%	9.6%	69.2%	2.0%	16080
Córdoba	14.0%	10.5%	13.4%	60.2%	1.9%	13338
Cúcuta	13.0%	8.7%	10.5%	67.0%	0.8%	7496
Dosquebradas	14.1%	6.6%	9.0%	69.3%	0.9%	1719
Duitama	8.4%	9.8%	9.9%	71.1%	0.8%	1261
Envigado	10.2%	8.1%	10.0%	71.0%	0.7%	1433
Facatativá	13.3%	9.0%	10.2%	67.1%	0.4%	1342
Florencia	15.1%	9.0%	10.8%	64.1%	1.0%	1996
Floridablanca	10.3%	7.1%	9.1%	72.7%	0.9%	2565
Fusagasugá	13.0%	7.4%	8.9%	69.7%	1.1%	1396
Girardot	15.4%	8.7%	10.9%	63.3%	1.7%	992
Girón	13.1%	7.3%	10.8%	66.9%	1.9%	1355
Guainía	11.9%	15.0%	13.0%	56.7%	3.4%	506
Guaviare	13.6%	9.9%	12.9%	61.4%	2.2%	819
Huila	13.4%	7.8%	10.2%	67.5%	1.2%	8363
Ibagué	13.4%	8.0%	9.9%	67.3%	1.4%	5165
Ipiales	9.3%	8.4%	10.7%	70.5%	1.1%	1294
Itagüí	11.5%	12.0%	13.4%	61.6%	1.4%	1818
Jamundí	15.2%	8.2%	8.9%	66.7%	1.1%	1115
La Guajira	14.8%	11.1%	12.1%	59.4%	2.6%	3449
Lorica	14.5%	11.8%	13.0%	59.0%	1.7%	1487

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ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Magangué	14.7%	9.9%	13.1%	59.0%	3.2%	1438
Magdalena	15.3%	11.4%	12.7%	57.4%	3.1%	8795
Maicao	13.4%	11.7%	14.0%	59.4%	1.6%	2062
Malambo	13.2%	7.6%	8.6%	69.4%	1.3%	1323
Manizales	11.9%	7.8%	10.6%	68.9%	0.8%	3032
Medellín	14.0%	9.8%	11.6%	62.9%	1.7%	20130
Meta	12.9%	8.1%	11.3%	65.5%	2.2%	5657
Montería	13.3%	8.7%	10.4%	66.2%	1.3%	5225
Mosquera	12.4%	7.0%	10.6%	69.7%	0.3%	1182
Nariño	12.4%	8.1%	10.3%	67.2%	2.0%	9264
Neiva	14.1%	8.0%	11.3%	65.7%	0.9%	3791
Norte de Santander	13.0%	8.0%	10.0%	67.6%	1.5%	7571
Palmira	12.2%	7.7%	10.3%	68.5%	1.3%	2804
Pasto	11.5%	7.7%	10.3%	69.4%	1.1%	4304
Pereira	14.5%	7.1%	9.3%	67.8%	1.3%	4557
Piedecuesta	12.8%	7.2%	9.2%	69.9%	0.9%	1480
Pitalito	12.1%	7.2%	9.8%	69.6%	1.4%	1682
Popayán	11.7%	7.8%	10.6%	68.1%	1.8%	2767
Putumayo	12.9%	9.5%	10.2%	64.5%	2.9%	4103
Quibdó	14.8%	10.3%	15.5%	56.1%	3.4%	1462
Quindío	14.6%	8.2%	10.2%	65.3%	1.7%	2674
Riohacha	12.5%	9.9%	14.0%	61.4%	2.1%	2508
Rionegro	10.6%	6.4%	7.7%	74.6%	0.8%	1163
Risaralda	13.1%	8.4%	10.4%	66.2%	1.9%	2974
Sabaneta	10.9%	8.1%	8.1%	65.5%	7.4%	568
Sahagún	13.0%	8.5%	11.8%	66.3%	0.4%	1250
San Andrés	16.4%	8.9%	13.5%	59.3%	1.9%	482
Santa Marta	14.3%	8.4%	10.7%	64.5%	2.0%	5685
Santander	11.8%	8.2%	10.6%	68.5%	0.9%	8530
Sincelejo	12.5%	8.3%	10.3%	66.4%	2.5%	3149
Soacha	14.3%	7.2%	9.4%	67.9%	1.2%	5303
Sogamoso	11.4%	8.9%	9.2%	67.0%	3.5%	1529
Soledad	13.6%	8.3%	9.5%	67.5%	1.1%	5391
Sucre	13.8%	10.5%	12.0%	62.1%	1.6%	7455
Tolima	13.7%	8.2%	11.5%	64.7%	1.8%	9818
Tuluá	14.7%	7.0%	10.2%	67.2%	0.9%	2185
Tumaco	16.6%	13.9%	14.1%	51.2%	4.3%	2675
Tunja	10.6%	7.7%	9.3%	71.8%	0.6%	1707
Turbo	18.5%	10.6%	12.6%	55.2%	3.2%	1695
Uribea	17.6%	15.3%	18.5%	45.4%	3.2%	985

Continúa en la siguiente página

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Valle del Cauca	13.9%	8.3%	10.1%	65.7%	1.9%	9042
Valledupar	11.8%	9.2%	10.3%	64.5%	4.2%	5256
Vaupés	15.5%	17.6%	11.7%	53.6%	1.7%	239
Vichada	12.5%	7.4%	10.8%	68.4%	0.9%	351
Villavicencio	12.3%	7.9%	10.1%	68.6%	1.1%	5504
Yopal	13.3%	8.5%	10.5%	66.5%	1.2%	1835
Zipaquirá	10.4%	9.2%	6.4%	73.4%	0.5%	1374
Colombia	13.2%	8.7%	10.8%	65.4%	1.9%	484618

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.



### • Pregunta 27.

Wilmar compró paletas para sus amigos y pagó \$4.050. Cada paleta le costó \$450.

¿Cuántas paletas compró?

- A. 9
- B. 10
- C. 11
- D. 12

### • Estructura

<b>Competencia</b>	Resolución
<b>Componente</b>	Númerico - variacional
<b>Afirmación</b>	Resolver y formular problemas multiplicativos rutinarios y no rutinarios de adición repetida, factor multiplicante, razón y producto cartesiano.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	A

### • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	44.9%	19.0%	14.4%	19.8%	1.9%	857
Antioquia	50.5%	19.6%	12.8%	13.7%	3.5%	27715
Apartadó	48.0%	21.8%	14.9%	14.4%	0.8%	1680
Arauca	53.0%	18.9%	13.5%	12.5%	2.2%	2693
Armenia	50.2%	21.2%	14.0%	12.9%	1.7%	2699
Atlántico	48.7%	20.2%	13.4%	15.2%	2.4%	5751
Barrancabermeja	51.8%	21.9%	11.7%	13.1%	1.5%	2577
Barranquilla	52.3%	21.7%	12.2%	12.3%	1.6%	11976
Bello	47.8%	23.4%	13.6%	13.2%	2.0%	3910
Bogotá, D.C.	53.8%	21.5%	12.0%	11.2%	1.5%	66037
Bolívar	43.0%	21.2%	15.4%	17.5%	3.0%	10443
Boyacá	55.7%	19.7%	11.4%	11.9%	1.4%	9413
Bucaramanga	57.1%	20.1%	11.1%	10.3%	1.4%	5472

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## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Buenaventura	51.9%	19.2%	11.7%	14.5%	2.7%	3465
Buga	49.8%	20.7%	14.8%	11.5%	3.2%	1156
Caldas	53.3%	17.8%	13.6%	13.6%	1.6%	5759
Cali	50.6%	21.4%	12.5%	12.7%	2.8%	18794
Caquetá	51.3%	18.9%	13.1%	14.1%	2.6%	3276
Cartagena	50.6%	21.0%	13.2%	12.9%	2.4%	10851
Cartago	47.1%	22.4%	13.6%	14.1%	2.8%	1127
Casanare	52.7%	18.9%	12.8%	13.4%	2.2%	2966
Cauca	53.1%	17.9%	11.7%	13.1%	4.2%	12305
Cesar	49.7%	21.0%	13.5%	13.9%	2.0%	8244
Chocó	42.0%	19.4%	13.8%	20.0%	4.7%	3821
Chía	50.4%	23.2%	13.1%	12.8%	0.6%	1324
Ciénaga	51.5%	19.5%	12.1%	13.4%	3.4%	1362
Cundinamarca	55.2%	19.7%	12.3%	10.7%	2.1%	16080
Córdoba	45.8%	21.2%	14.4%	16.6%	2.0%	13338
Cúcuta	53.9%	21.4%	11.9%	11.9%	0.9%	7496
Dosquebradas	53.8%	20.5%	13.5%	11.1%	1.1%	1719
Duitama	58.6%	21.9%	10.3%	8.3%	0.9%	1261
Envigado	51.8%	23.8%	13.2%	10.3%	0.9%	1433
Facatativá	57.7%	20.9%	10.1%	10.2%	1.0%	1342
Florencia	50.2%	20.3%	14.2%	14.0%	1.4%	1996
Floridablanca	57.6%	20.5%	11.3%	9.8%	0.7%	2565
Fusagasugá	50.9%	22.2%	13.7%	12.3%	0.9%	1396
Girardot	46.7%	21.9%	14.5%	15.5%	1.4%	992
Girón	54.8%	20.7%	10.3%	12.1%	2.1%	1355
Guainía	44.7%	22.9%	13.4%	14.8%	4.2%	506
Guaviare	47.1%	19.3%	16.0%	15.1%	2.4%	819
Huila	54.8%	18.5%	11.9%	13.4%	1.4%	8363
Ibagué	52.5%	22.7%	12.4%	10.9%	1.5%	5165
Ipiales	58.5%	18.3%	13.0%	9.1%	1.1%	1294
Itagüí	43.3%	27.2%	15.2%	13.1%	1.2%	1818
Jamundí	51.3%	20.2%	11.9%	15.4%	1.2%	1115
La Guajira	47.5%	19.1%	15.4%	15.5%	2.5%	3449
Lorica	45.3%	21.0%	14.3%	17.1%	2.2%	1487
Magangué	46.6%	22.3%	13.4%	14.3%	3.5%	1438
Magdalena	46.2%	20.5%	14.1%	15.8%	3.5%	8795
Maicao	47.9%	20.8%	14.4%	15.4%	1.6%	2062
Malambo	55.7%	19.8%	11.3%	11.4%	1.8%	1323
Manizales	53.4%	21.7%	12.1%	11.8%	1.1%	3032
Medellín	45.5%	23.6%	15.2%	13.9%	1.8%	20130

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ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Meta	52.1%	19.5%	12.9%	12.7%	2.7%	5657
Montería	46.6%	22.6%	14.6%	14.8%	1.4%	5225
Mosquera	55.3%	20.8%	11.7%	11.8%	0.4%	1182
Nariño	58.8%	17.0%	10.3%	11.6%	2.3%	9264
Neiva	53.7%	20.5%	13.3%	11.6%	1.0%	3791
Norte de Santander	55.7%	18.9%	12.1%	11.7%	1.6%	7571
Palmira	52.9%	20.4%	13.2%	11.9%	1.7%	2804
Pasto	56.4%	19.7%	12.3%	10.3%	1.3%	4304
Pereira	52.6%	20.5%	13.1%	12.1%	1.8%	4557
Piedecuesta	55.1%	21.1%	12.2%	10.6%	0.9%	1480
Pitalito	53.2%	20.0%	13.1%	12.1%	1.6%	1682
Popayán	55.7%	19.3%	12.0%	10.7%	2.3%	2767
Putumayo	51.2%	19.0%	14.1%	12.7%	3.0%	4103
Quibdó	46.6%	19.8%	16.0%	14.5%	3.0%	1462
Quindío	47.8%	22.8%	14.1%	13.4%	1.9%	2674
Riohacha	49.6%	20.6%	12.6%	15.1%	2.2%	2508
Rionegro	50.0%	22.3%	15.0%	11.5%	1.3%	1163
Risaralda	53.8%	18.1%	12.8%	13.7%	1.6%	2974
Sabaneta	47.5%	20.8%	13.4%	10.7%	7.6%	568
Sahagún	49.5%	21.6%	13.4%	14.6%	0.9%	1250
San Andrés	43.6%	23.2%	15.8%	15.1%	2.3%	482
Santa Marta	53.1%	19.0%	12.6%	13.5%	1.9%	5685
Santander	58.2%	18.2%	11.2%	11.3%	1.0%	8530
Sincelejo	50.1%	19.9%	12.7%	14.5%	2.7%	3149
Soacha	51.2%	21.4%	12.9%	13.1%	1.4%	5303
Sogamoso	54.9%	21.1%	11.8%	8.8%	3.5%	1529
Soledad	55.9%	20.7%	10.9%	11.4%	1.1%	5391
Sucre	45.9%	20.7%	14.3%	17.3%	1.8%	7455
Tolima	53.2%	19.1%	12.7%	13.0%	1.9%	9818
Tuluá	52.9%	19.6%	13.0%	13.7%	0.9%	2185
Tumaco	39.9%	21.1%	16.3%	17.9%	4.8%	2675
Tunja	57.7%	19.1%	12.1%	10.3%	0.8%	1707
Turbo	44.3%	22.2%	12.9%	17.2%	3.4%	1695
Uribe	45.5%	18.8%	12.8%	20.1%	2.8%	985
Valle del Cauca	50.9%	19.8%	13.7%	13.6%	2.1%	9042
Valledupar	50.7%	19.1%	12.6%	12.8%	4.8%	5256
Vaupés	30.5%	26.8%	12.6%	28.5%	1.7%	239
Vichada	48.1%	20.8%	16.8%	13.4%	0.9%	351
Villavicencio	56.7%	20.4%	11.4%	10.2%	1.3%	5504

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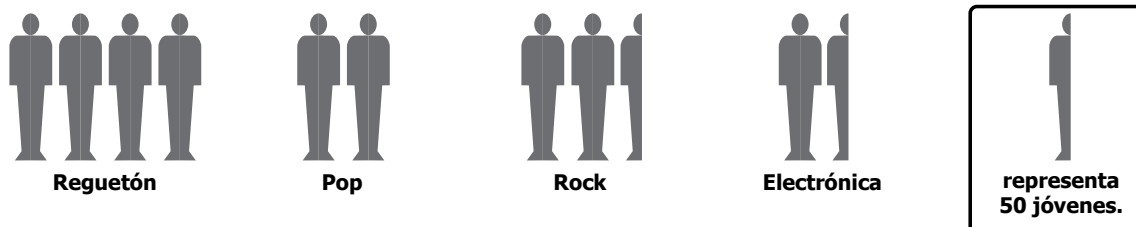
ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Yopal	55.4%	21.4%	12.4%	9.6%	1.3%	1835
Zipaquirá	57.7%	21.4%	9.8%	10.6%	0.5%	1374
Colombia	51.6%	20.5%	12.8%	13.0%	2.1%	484618

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.



• **Pregunta 28.**

La siguiente ilustración muestra información sobre las preferencias musicales de un grupo de 1.000 jóvenes.



¿Cuántos jóvenes prefieren la música rock?

- A. 150
- B. 200
- C. 250
- D. 400

• **Estructura**

<b>Competencia</b>	Comunicación
<b>Componente</b>	Aleatorio
<b>Afirmación</b>	Representar gráficamente un conjunto de datos e interpretar representaciones gráficas.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	C

• **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	26.5%	14.6%	44.8%	12.0%	2.1%	857
Antioquia	24.4%	11.4%	53.3%	7.5%	3.4%	27715
Apartadó	25.9%	13.0%	52.2%	8.0%	0.9%	1680
Arauca	21.1%	10.5%	60.2%	6.2%	2.1%	2693
Armenia	24.3%	9.6%	59.2%	5.5%	1.4%	2699
Atlántico	23.0%	12.9%	52.4%	9.5%	2.2%	5751
Barrancabermeja	22.9%	10.9%	58.1%	6.8%	1.2%	2577

Continúa en la siguiente página

## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Barranquilla	23.5%	9.9%	58.9%	6.3%	1.4%	11976
Bello	25.6%	9.0%	58.8%	4.7%	1.8%	3910
Bogotá, D.C.	22.1%	7.7%	64.8%	4.0%	1.4%	66037
Bolívar	25.6%	14.3%	44.7%	12.2%	3.2%	10443
Boyacá	23.0%	10.2%	59.3%	6.3%	1.3%	9413
Bucaramanga	20.1%	7.8%	67.1%	3.8%	1.2%	5472
Buenaventura	24.3%	11.0%	53.3%	8.8%	2.6%	3465
Buga	22.8%	9.7%	58.0%	6.5%	3.0%	1156
Caldas	24.2%	10.6%	57.1%	6.5%	1.6%	5759
Cali	23.1%	9.5%	59.9%	4.9%	2.6%	18794
Caquetá	22.6%	13.7%	52.9%	7.6%	3.2%	3276
Cartagena	23.6%	11.5%	54.4%	8.2%	2.3%	10851
Cartago	22.5%	10.1%	59.0%	5.7%	2.7%	1127
Casanare	23.2%	11.4%	55.7%	7.1%	2.6%	2966
Cauca	21.7%	12.1%	53.1%	9.0%	4.1%	12305
Cesar	23.4%	12.6%	52.3%	9.7%	2.1%	8244
Chocó	25.0%	15.2%	40.2%	15.0%	4.6%	3821
Chía	22.9%	6.3%	66.4%	4.1%	0.4%	1324
Ciénaga	22.9%	11.2%	52.4%	9.8%	3.6%	1362
Cundinamarca	21.2%	8.8%	62.7%	5.3%	2.0%	16080
Córdoba	25.1%	14.4%	47.2%	11.1%	2.2%	13338
Cúcuta	22.4%	8.6%	63.7%	4.7%	0.7%	7496
Dosquebradas	24.6%	9.5%	61.2%	3.4%	1.3%	1719
Duitama	16.5%	6.4%	73.4%	2.9%	0.8%	1261
Envigado	20.1%	6.6%	68.2%	4.2%	1.0%	1433
Facatativá	24.2%	7.7%	63.6%	4.2%	0.3%	1342
Florencia	24.3%	11.6%	55.0%	7.7%	1.4%	1996
Floridablanca	19.6%	7.5%	69.0%	3.3%	0.7%	2565
Fusagasugá	25.1%	8.7%	59.6%	5.5%	1.1%	1396
Girardot	24.2%	11.8%	55.2%	7.1%	1.7%	992
Girón	22.5%	9.7%	60.7%	5.2%	1.8%	1355
Guainía	23.3%	18.4%	44.9%	9.9%	3.6%	506
Guaviare	20.9%	14.5%	52.0%	10.4%	2.2%	819
Huila	22.3%	11.4%	58.2%	6.7%	1.3%	8363
Ibagué	20.5%	8.8%	64.3%	5.2%	1.2%	5165
Ipiales	19.8%	8.8%	65.8%	4.7%	0.9%	1294
Itagüí	23.2%	10.1%	59.7%	5.2%	1.8%	1818
Jamundí	26.0%	11.0%	54.3%	7.4%	1.3%	1115
La Guajira	23.4%	13.8%	47.3%	12.6%	2.9%	3449
Lorica	26.4%	14.1%	46.5%	11.0%	2.0%	1487

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Magangué	25.4%	12.3%	49.7%	9.0%	3.7%	1438
Magdalena	23.9%	13.7%	46.7%	12.3%	3.3%	8795
Maicao	25.8%	14.2%	48.0%	10.4%	1.7%	2062
Malambo	18.7%	10.3%	60.8%	8.2%	2.0%	1323
Manizales	22.8%	8.0%	63.6%	4.5%	1.2%	3032
Medellín	24.7%	11.6%	55.3%	6.4%	1.9%	20130
Meta	21.7%	10.4%	58.0%	7.4%	2.4%	5657
Montería	23.2%	12.9%	53.2%	9.0%	1.7%	5225
Mosquera	21.5%	7.5%	66.0%	4.3%	0.7%	1182
Nariño	22.2%	10.0%	59.1%	6.7%	2.0%	9264
Neiva	22.7%	9.4%	60.4%	6.5%	0.9%	3791
Norte de Santander	21.1%	10.8%	60.0%	6.4%	1.6%	7571
Palmira	21.5%	7.3%	64.2%	5.2%	1.8%	2804
Pasto	22.2%	8.5%	63.5%	4.5%	1.3%	4304
Pereira	23.4%	9.6%	60.6%	4.9%	1.5%	4557
Piedecuesta	21.5%	9.5%	63.0%	4.8%	1.2%	1480
Pitalito	23.1%	10.4%	59.6%	5.6%	1.3%	1682
Popayán	22.2%	8.8%	61.8%	5.3%	2.0%	2767
Putumayo	21.5%	12.1%	56.4%	7.1%	2.8%	4103
Quibdó	24.3%	12.9%	51.4%	8.3%	3.1%	1462
Quindío	25.6%	10.4%	56.4%	6.2%	1.5%	2674
Riohacha	24.6%	13.7%	49.2%	10.2%	2.3%	2508
Rionegro	21.3%	8.7%	66.1%	3.2%	0.7%	1163
Risaralda	24.8%	10.0%	56.8%	6.5%	2.1%	2974
Sabaneta	21.1%	7.6%	59.7%	3.9%	7.7%	568
Sahagún	23.6%	11.9%	54.8%	8.8%	0.9%	1250
San Andrés	26.8%	14.7%	50.0%	6.8%	1.7%	482
Santa Marta	24.0%	11.2%	55.6%	7.2%	2.1%	5685
Santander	21.5%	10.2%	61.1%	6.2%	1.1%	8530
Sincelejo	22.4%	12.0%	55.7%	7.3%	2.6%	3149
Soacha	23.4%	9.0%	61.4%	4.8%	1.3%	5303
Sogamoso	17.8%	7.9%	66.3%	4.4%	3.6%	1529
Soledad	22.1%	9.0%	61.8%	5.7%	1.3%	5391
Sucre	24.9%	14.1%	47.9%	11.4%	1.8%	7455
Tolima	23.1%	11.5%	55.6%	7.9%	1.9%	9818
Tuluá	24.8%	8.4%	59.7%	5.9%	1.2%	2185
Tumaco	24.0%	16.7%	39.6%	14.7%	4.9%	2675
Tunja	19.7%	6.8%	69.4%	3.6%	0.5%	1707
Turbo	28.3%	15.6%	42.5%	10.1%	3.5%	1695
Uribe	23.6%	22.2%	36.3%	15.4%	2.4%	985

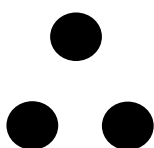
Continúa en la siguiente página

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Valle del Cauca	24.2%	10.5%	56.5%	6.8%	2.0%	9042
Valledupar	22.7%	11.2%	54.7%	6.8%	4.6%	5256
Vaupés	28.0%	20.1%	31.8%	18.4%	1.7%	239
Vichada	25.9%	15.4%	48.4%	9.4%	0.9%	351
Villavicencio	21.1%	8.1%	65.0%	4.8%	0.9%	5504
Yopal	21.1%	9.8%	62.8%	5.2%	1.2%	1835
Zipaquirá	22.4%	7.8%	65.6%	4.0%	0.2%	1374
Colombia	23.0%	10.5%	57.6%	6.8%	2.0%	484618

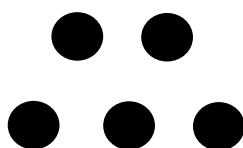
\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 29.**

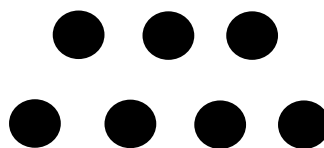
Observa la secuencia de figuras, no aparece la figura 4.



**Figura 1**



**Figura 2**

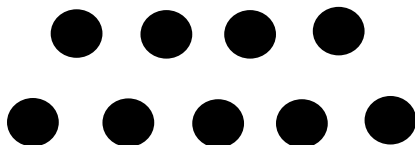


**Figura 3**

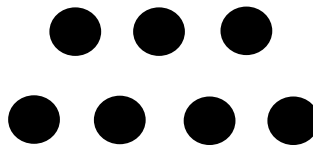
**Figura 4**

¿Cuál de las siguientes figuras es la 4?

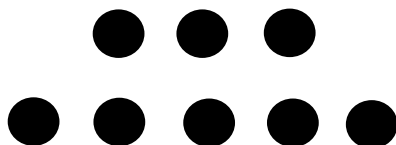
A.



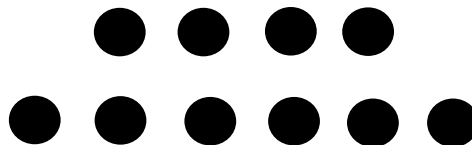
B.



C.



D.



• **Estructura**

<b>Competencia</b>	Resolución
<b>Componente</b>	Espacial - métrico
<b>Afirmación</b>	Usar representaciones geométricas y establecer relaciones entre ellas para solucionar problemas.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	A

## • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	38.6%	18.1%	20.3%	21.2%	1.8%	857
Antioquia	49.2%	12.1%	16.9%	18.4%	3.5%	27715
Apartadó	47.2%	16.0%	18.6%	17.1%	1.1%	1680
Arauca	55.6%	11.4%	14.2%	16.9%	1.9%	2693
Armenia	58.3%	9.3%	15.6%	15.2%	1.7%	2699
Atlántico	46.2%	15.5%	17.4%	18.6%	2.3%	5751
Barrancabermeja	57.0%	11.4%	15.5%	14.7%	1.4%	2577
Barranquilla	58.4%	10.9%	15.3%	14.0%	1.5%	11976
Bello	59.1%	8.9%	15.5%	14.8%	1.8%	3910
Bogotá, D.C.	68.3%	6.4%	12.9%	11.0%	1.4%	66037
Bolívar	37.0%	18.7%	19.2%	21.7%	3.5%	10443
Boyacá	57.7%	9.6%	15.9%	15.4%	1.5%	9413
Bucaramanga	70.0%	5.8%	11.8%	11.0%	1.3%	5472
Buenaventura	47.5%	15.4%	16.8%	17.3%	3.0%	3465
Buga	55.4%	11.7%	15.7%	14.1%	3.2%	1156
Caldas	54.6%	10.4%	16.5%	16.7%	1.8%	5759
Cali	59.6%	9.3%	15.0%	13.6%	2.5%	18794
Caquetá	44.9%	13.9%	17.8%	20.3%	3.1%	3276
Cartagena	51.6%	13.1%	17.0%	16.0%	2.2%	10851
Cartago	55.5%	10.5%	16.4%	14.5%	3.1%	1127
Casanare	51.5%	12.2%	15.8%	18.2%	2.3%	2966
Cauca	48.1%	13.5%	16.2%	17.9%	4.3%	12305
Cesar	47.0%	14.8%	17.0%	19.2%	2.0%	8244
Chocó	33.8%	21.4%	18.3%	22.0%	4.5%	3821
Chía	70.5%	5.8%	13.6%	9.7%	0.4%	1324
Ciénaga	46.2%	16.7%	17.3%	16.2%	3.7%	1362
Cundinamarca	63.1%	8.1%	13.5%	13.2%	2.1%	16080
Córdoba	40.0%	17.1%	18.8%	22.0%	2.2%	13338
Cúcuta	62.7%	9.1%	14.6%	12.9%	0.8%	7496
Dosquebradas	64.3%	7.2%	15.3%	11.6%	1.5%	1719
Duitama	77.4%	4.7%	9.2%	7.3%	1.4%	1261
Envigado	71.9%	5.7%	11.2%	10.3%	0.9%	1433
Facatativá	65.4%	7.9%	14.2%	11.9%	0.5%	1342
Florencia	51.9%	12.3%	18.7%	15.6%	1.5%	1996
Floridablanca	71.4%	5.1%	11.9%	10.9%	0.8%	2565
Fusagasugá	63.5%	8.2%	13.0%	14.4%	0.9%	1396
Girardot	47.6%	15.1%	19.2%	16.6%	1.5%	992
Girón	63.4%	8.0%	12.9%	13.8%	1.9%	1355
Guainía	32.2%	16.2%	21.3%	26.1%	4.2%	506

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Guaviare	42.9%	15.3%	17.6%	21.7%	2.6%	819
Huila	53.4%	11.3%	16.8%	17.3%	1.2%	8363
Ibagué	63.6%	8.5%	13.4%	13.2%	1.3%	5165
Ipiales	66.5%	7.3%	13.1%	12.1%	1.0%	1294
Itagüí	54.4%	12.2%	16.3%	15.5%	1.6%	1818
Jamundí	49.3%	11.4%	21.0%	17.2%	1.1%	1115
La Guajira	41.8%	17.6%	18.4%	19.3%	3.0%	3449
Lorica	38.3%	18.0%	21.0%	20.3%	2.4%	1487
Magangué	42.2%	16.0%	18.2%	19.7%	3.8%	1438
Magdalena	38.4%	18.9%	18.2%	21.2%	3.3%	8795
Maicao	40.9%	18.0%	17.9%	21.0%	2.1%	2062
Malambo	53.5%	13.5%	13.8%	17.5%	1.8%	1323
Manizales	65.0%	7.8%	13.3%	12.7%	1.1%	3032
Medellín	54.1%	11.4%	16.8%	15.6%	2.0%	20130
Meta	52.0%	11.2%	17.1%	17.3%	2.4%	5657
Montería	48.9%	14.0%	17.8%	17.6%	1.7%	5225
Mosquera	64.8%	8.2%	13.4%	13.2%	0.4%	1182
Nariño	55.6%	10.6%	15.2%	16.8%	1.9%	9264
Neiva	58.6%	10.1%	15.2%	15.0%	1.1%	3791
Norte de Santander	55.4%	10.6%	15.7%	16.6%	1.7%	7571
Palmira	62.6%	10.0%	12.4%	13.4%	1.6%	2804
Pasto	65.5%	7.8%	13.3%	12.2%	1.2%	4304
Pereira	61.3%	8.3%	14.9%	13.9%	1.7%	4557
Piedecuesta	65.1%	7.2%	14.0%	12.9%	0.9%	1480
Pitalito	58.3%	9.9%	15.9%	14.7%	1.2%	1682
Popayán	62.5%	7.5%	15.0%	12.9%	2.1%	2767
Putumayo	50.7%	11.4%	16.8%	18.0%	3.1%	4103
Quibdó	46.0%	16.1%	17.5%	17.5%	2.9%	1462
Quindío	52.2%	11.7%	17.0%	17.5%	1.6%	2674
Riohacha	46.1%	14.9%	17.1%	19.3%	2.6%	2508
Rionegro	66.0%	6.0%	12.8%	14.0%	1.1%	1163
Risaralda	52.6%	11.4%	16.8%	16.8%	2.3%	2974
Sabaneta	65.3%	7.4%	9.7%	10.0%	7.6%	568
Sahagún	52.1%	11.8%	15.5%	19.7%	0.9%	1250
San Andrés	44.2%	15.4%	19.9%	18.7%	1.9%	482
Santa Marta	52.3%	12.2%	16.7%	16.8%	2.0%	5685
Santander	58.3%	9.8%	14.9%	16.0%	1.1%	8530
Sincelejo	52.4%	12.0%	16.9%	16.0%	2.7%	3149
Soacha	62.0%	8.5%	14.8%	13.5%	1.2%	5303
Sogamoso	66.3%	6.3%	11.4%	12.4%	3.7%	1529

Continúa en la siguiente página

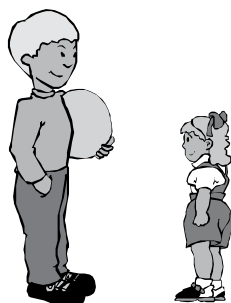
ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Soledad	60.4%	10.9%	14.7%	12.8%	1.2%	5391
Sucre	41.1%	17.6%	17.8%	21.6%	1.9%	7455
Tolima	50.4%	13.1%	16.3%	18.2%	2.1%	9818
Tuluá	60.3%	9.5%	15.1%	13.8%	1.3%	2185
Tumaco	32.8%	21.3%	19.1%	21.8%	4.9%	2675
Tunja	71.1%	7.1%	10.7%	10.5%	0.5%	1707
Turbo	34.6%	17.5%	21.5%	22.9%	3.5%	1695
Uribe	27.1%	23.4%	22.4%	23.7%	3.5%	985
Valle del Cauca	52.8%	11.3%	17.2%	16.6%	2.1%	9042
Valledupar	51.6%	12.3%	15.8%	15.7%	4.5%	5256
Vaupés	25.9%	19.7%	20.9%	31.4%	2.1%	239
Vichada	42.5%	11.1%	25.4%	20.5%	0.6%	351
Villavicencio	62.9%	8.3%	13.8%	14.0%	1.1%	5504
Yopal	60.7%	8.9%	14.9%	14.0%	1.6%	1835
Zipaquirá	69.7%	5.8%	13.4%	10.7%	0.4%	1374
Colombia	55.4%	11.1%	15.6%	15.7%	2.1%	484618

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.



• **Pregunta 30.**

Enrique y Susana son hermanos. La estatura de Enrique es 1,85 m y la de Susana 1,23 m.



¿Cuál es la diferencia de estatura entre los dos hermanos?

- A. 62 mm.
- B. 62 cm.
- C. 62 dm.
- D. 62 m.

• **Estructura**

<b>Competencia</b>	Comunicación
<b>Componente</b>	Espacial - métrico
<b>Afirmación</b>	Identificar unidades tanto estandarizadas como no convencionales apropiadas para diferentes mediciones y establecer relaciones entre ellas.
<b>Nivel de desempeño</b>	Avanzado
<b>Respuesta Correcta</b>	B

• **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	15.2%	32.8%	15.9%	33.5%	2.7%	857
Antioquia	12.3%	35.4%	9.5%	39.3%	3.6%	27715
Apartadó	15.8%	30.2%	12.8%	40.4%	0.9%	1680
Arauca	12.0%	38.1%	10.0%	37.7%	2.2%	2693
Armenia	10.3%	38.8%	8.4%	40.5%	2.0%	2699

Continúa en la siguiente página

## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Atlántico	15.4%	30.0%	12.2%	39.9%	2.5%	5751
Barrancabermeja	12.5%	34.0%	9.2%	43.0%	1.3%	2577
Barranquilla	13.0%	32.8%	9.4%	43.1%	1.8%	11976
Bello	11.7%	39.4%	7.7%	39.6%	1.7%	3910
Bogotá, D.C.	9.3%	41.0%	7.1%	41.0%	1.5%	66037
Bolívar	17.3%	28.2%	14.1%	36.8%	3.7%	10443
Boyacá	9.3%	38.0%	9.0%	42.3%	1.4%	9413
Bucaramanga	7.5%	40.7%	6.8%	43.6%	1.4%	5472
Buenaventura	16.1%	29.0%	9.6%	42.5%	2.8%	3465
Buga	11.1%	38.8%	10.2%	36.4%	3.5%	1156
Caldas	12.0%	35.8%	9.4%	41.0%	1.9%	5759
Cali	10.7%	38.4%	8.7%	39.4%	2.7%	18794
Caquetá	12.0%	36.1%	10.5%	38.1%	3.3%	3276
Cartagena	14.0%	32.1%	10.7%	40.8%	2.5%	10851
Cartago	12.0%	39.0%	9.9%	36.2%	2.9%	1127
Casanare	10.5%	36.6%	9.7%	40.9%	2.3%	2966
Cauca	12.8%	35.7%	10.2%	37.0%	4.4%	12305
Cesar	13.4%	33.7%	11.8%	39.1%	2.1%	8244
Chocó	19.9%	22.0%	14.7%	38.7%	4.8%	3821
Chía	7.9%	45.2%	7.3%	38.7%	0.9%	1324
Ciénaga	16.4%	29.8%	10.3%	39.7%	3.7%	1362
Cundinamarca	9.2%	38.7%	8.3%	41.7%	2.1%	16080
Córdoba	15.6%	30.3%	13.0%	38.7%	2.4%	13338
Cúcuta	10.4%	34.9%	8.4%	45.4%	1.0%	7496
Dosquebradas	11.1%	41.0%	7.3%	39.3%	1.3%	1719
Duitama	6.4%	41.8%	6.2%	44.7%	0.9%	1261
Envigado	8.9%	52.5%	6.8%	30.9%	0.9%	1433
Facatativá	10.5%	37.9%	6.2%	44.6%	0.8%	1342
Florencia	11.9%	33.3%	11.0%	41.9%	1.9%	1996
Floridablanca	7.7%	43.7%	6.2%	41.6%	0.8%	2565
Fusagasugá	9.5%	39.4%	8.2%	41.8%	1.1%	1396
Girardot	12.1%	31.4%	10.8%	43.9%	1.9%	992
Girón	8.9%	34.7%	8.1%	46.2%	2.1%	1355
Guainía	14.8%	29.8%	13.6%	38.3%	3.4%	506
Guaviare	12.1%	35.3%	12.7%	37.6%	2.3%	819
Huila	11.3%	38.0%	9.7%	39.6%	1.4%	8363
Ibagué	9.9%	40.7%	7.4%	40.7%	1.3%	5165
Ipiales	9.8%	43.8%	7.3%	37.7%	1.3%	1294
Itagüí	13.4%	40.7%	11.4%	32.6%	1.8%	1818
Jamundí	13.7%	37.0%	8.7%	39.8%	0.8%	1115

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
La Guajira	16.0%	30.6%	12.1%	37.8%	3.5%	3449
Lorica	14.7%	29.5%	13.3%	39.9%	2.6%	1487
Magangué	17.3%	23.4%	14.7%	40.8%	3.7%	1438
Magdalena	16.9%	28.0%	12.5%	38.9%	3.7%	8795
Maicao	16.0%	25.9%	12.6%	43.4%	2.1%	2062
Malambo	13.5%	35.9%	9.2%	39.8%	1.7%	1323
Manizales	9.5%	40.4%	8.1%	41.0%	1.0%	3032
Medellín	13.2%	36.9%	10.7%	37.1%	2.1%	20130
Meta	10.5%	37.3%	9.1%	40.6%	2.5%	5657
Montería	13.8%	32.1%	11.0%	41.4%	1.7%	5225
Mosquera	10.4%	40.6%	6.8%	41.4%	0.8%	1182
Nariño	11.4%	38.9%	8.5%	39.2%	2.0%	9264
Neiva	10.3%	34.3%	10.1%	44.1%	1.2%	3791
Norte de Santander	11.3%	36.3%	8.9%	41.6%	1.9%	7571
Palmira	9.9%	36.3%	8.9%	43.5%	1.4%	2804
Pasto	9.1%	40.9%	8.1%	40.6%	1.3%	4304
Pereira	10.6%	41.7%	7.9%	38.1%	1.7%	4557
Piedecuesta	9.3%	39.1%	8.1%	42.5%	1.0%	1480
Pitalito	10.6%	40.6%	9.2%	38.2%	1.3%	1682
Popayán	8.7%	38.8%	7.0%	43.1%	2.4%	2767
Putumayo	11.0%	37.6%	10.6%	37.9%	3.0%	4103
Quibdó	17.3%	26.2%	10.9%	41.9%	3.7%	1462
Quindío	10.7%	36.3%	10.8%	40.7%	1.5%	2674
Riohacha	15.3%	29.0%	11.2%	41.6%	2.9%	2508
Rionegro	10.1%	42.8%	7.5%	38.6%	0.9%	1163
Risaralda	11.1%	35.3%	9.8%	41.8%	2.1%	2974
Sabaneta	8.1%	44.9%	6.9%	31.5%	8.6%	568
Sahagún	12.3%	33.5%	11.4%	42.2%	0.6%	1250
San Andrés	12.2%	31.3%	13.7%	41.3%	1.5%	482
Santa Marta	13.8%	31.6%	9.9%	42.2%	2.4%	5685
Santander	9.6%	40.1%	9.2%	39.8%	1.3%	8530
Sincelejo	13.4%	33.8%	10.2%	39.8%	2.8%	3149
Soacha	10.5%	35.5%	7.7%	44.9%	1.3%	5303
Sogamoso	8.4%	40.3%	7.3%	40.2%	3.9%	1529
Soledad	12.2%	32.1%	9.6%	44.5%	1.6%	5391
Sucre	16.2%	28.5%	13.1%	40.1%	2.1%	7455
Tolima	11.9%	35.5%	10.1%	40.3%	2.1%	9818
Tuluá	11.5%	38.6%	9.2%	39.6%	1.1%	2185
Tumaco	17.7%	25.5%	14.6%	37.1%	5.2%	2675
Tunja	7.4%	43.1%	6.9%	41.8%	0.8%	1707

Continúa en la siguiente página

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Turbo	16.5%	25.3%	15.1%	38.9%	4.2%	1695
Uribe	19.9%	25.8%	18.2%	32.6%	3.6%	985
Valle del Cauca	12.1%	36.7%	9.3%	39.5%	2.3%	9042
Valledupar	12.2%	32.9%	9.6%	40.7%	4.6%	5256
Vaupés	14.6%	20.1%	15.1%	47.7%	2.5%	239
Vichada	12.5%	34.5%	11.4%	40.7%	0.9%	351
Villavicencio	9.0%	39.7%	7.4%	42.4%	1.5%	5504
Yopal	9.0%	38.5%	9.3%	42.0%	1.2%	1835
Zipaquirá	8.8%	39.2%	5.9%	45.4%	0.7%	1374
Colombia	11.8%	36.1%	9.5%	40.3%	2.2%	484618

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.



### • Pregunta 31.

El 2 y el 9 de marzo del año 1998 fueron lunes.

¿Cuál de las siguientes fechas del mes de marzo de 1998 **NO** fue un lunes?

- A. 16
- B. 21
- C. 23
- D. 30

### • Estructura

<b>Competencia</b>	Razonamiento
<b>Componente</b>	Numérico - variacional
<b>Afirmación</b>	Justificar propiedades y relaciones numéricas usando ejemplos y contraejemplos.
<b>Nivel de desempeño</b>	Avanzado
<b>Respuesta Correcta</b>	B

### • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	23.6%	31.2%	18.3%	24.7%	2.2%	857
Antioquia	24.0%	38.5%	17.3%	16.4%	3.7%	27715
Apartadó	23.7%	37.4%	17.8%	20.0%	1.1%	1680
Arauca	24.1%	40.8%	17.5%	15.3%	2.2%	2693
Armenia	26.8%	41.1%	16.2%	14.0%	2.0%	2699
Atlántico	23.8%	36.6%	18.1%	19.1%	2.4%	5751
Barrancabermeja	25.7%	41.3%	16.3%	15.2%	1.5%	2577
Barranquilla	28.2%	40.3%	15.7%	14.2%	1.7%	11976
Bello	28.6%	39.4%	16.3%	13.6%	2.1%	3910
Bogotá, D.C.	25.5%	46.4%	15.2%	11.2%	1.7%	66037
Bolívar	25.6%	30.8%	18.9%	21.4%	3.3%	10443
Boyacá	24.5%	41.6%	17.1%	15.4%	1.4%	9413
Bucaramanga	25.4%	46.8%	15.1%	10.7%	1.9%	5472
Buenaventura	23.6%	39.5%	15.9%	17.9%	3.1%	3465
Buga	24.7%	40.4%	19.0%	12.1%	3.7%	1156

Continúa en la siguiente página

## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Caldas	24.3%	40.6%	16.9%	16.1%	2.0%	5759
Cali	26.1%	42.1%	15.5%	13.3%	3.0%	18794
Caquetá	23.4%	38.1%	18.7%	16.6%	3.2%	3276
Cartagena	25.6%	40.0%	15.6%	16.2%	2.6%	10851
Cartago	24.9%	39.1%	17.6%	15.0%	3.4%	1127
Casanare	26.2%	37.7%	17.9%	15.5%	2.8%	2966
Cauca	21.8%	41.6%	16.4%	15.5%	4.6%	12305
Cesar	24.0%	37.0%	17.6%	19.3%	2.1%	8244
Chocó	23.5%	31.0%	19.1%	22.1%	4.3%	3821
Chía	24.8%	46.8%	15.8%	11.8%	0.8%	1324
Ciénaga	24.9%	37.2%	18.8%	15.2%	4.0%	1362
Cundinamarca	25.1%	44.4%	15.7%	12.5%	2.3%	16080
Córdoba	23.9%	33.0%	19.5%	21.5%	2.1%	13338
Cúcuta	24.8%	44.2%	16.4%	13.4%	1.2%	7496
Dosquebradas	27.4%	41.9%	16.4%	12.7%	1.6%	1719
Duitama	22.6%	51.1%	16.7%	8.6%	1.0%	1261
Envigado	23.3%	51.3%	12.8%	11.4%	1.1%	1433
Facatativá	26.2%	46.7%	14.2%	11.6%	1.2%	1342
Florencia	27.9%	37.7%	17.5%	15.2%	1.8%	1996
Floridablanca	24.8%	49.0%	15.3%	9.7%	1.2%	2565
Fusagasugá	26.9%	43.1%	16.0%	12.8%	1.2%	1396
Girardot	30.6%	34.6%	17.0%	15.7%	2.0%	992
Girón	27.5%	42.7%	15.7%	11.8%	2.3%	1355
Guainía	24.1%	30.6%	18.2%	22.7%	4.3%	506
Guaviare	22.5%	35.9%	20.8%	18.8%	2.1%	819
Huila	24.7%	41.2%	16.9%	15.7%	1.5%	8363
Ibagué	25.3%	43.9%	16.4%	12.9%	1.5%	5165
Ipiales	23.8%	46.4%	15.6%	12.7%	1.5%	1294
Itagüí	25.7%	37.7%	17.4%	17.4%	1.7%	1818
Jamundí	25.4%	36.6%	18.8%	17.6%	1.6%	1115
La Guajira	24.0%	35.3%	18.2%	19.7%	2.8%	3449
Lorica	22.7%	31.7%	21.7%	21.7%	2.2%	1487
Magangué	27.1%	30.6%	19.9%	19.0%	3.4%	1438
Magdalena	24.4%	33.0%	18.8%	20.3%	3.5%	8795
Maicao	26.7%	32.5%	18.3%	20.7%	1.8%	2062
Malambo	25.1%	44.6%	14.7%	13.8%	1.7%	1323
Manizales	26.0%	45.7%	16.0%	11.1%	1.2%	3032
Medellín	26.1%	38.6%	18.0%	15.4%	1.9%	20130
Meta	25.2%	38.7%	17.7%	15.8%	2.7%	5657
Montería	26.0%	35.7%	17.6%	18.8%	2.0%	5225

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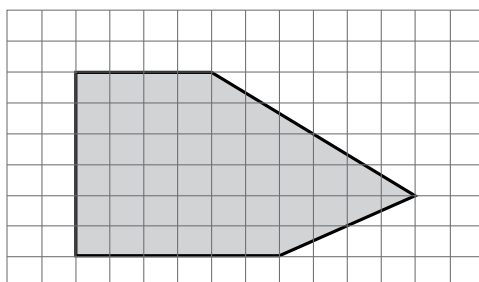


ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Mosquera	26.8%	44.6%	14.6%	13.3%	0.7%	1182
Nariño	22.4%	44.1%	16.1%	15.2%	2.2%	9264
Neiva	27.9%	40.3%	16.2%	14.2%	1.4%	3791
Norte de Santander	24.2%	43.5%	16.4%	14.2%	1.8%	7571
Palmira	24.0%	45.5%	15.6%	13.0%	1.9%	2804
Pasto	26.9%	44.6%	15.3%	11.6%	1.6%	4304
Pereira	24.7%	44.6%	15.9%	12.7%	2.1%	4557
Piedecuesta	26.3%	43.9%	15.6%	12.8%	1.4%	1480
Pitalito	26.5%	39.6%	18.0%	14.3%	1.6%	1682
Popayán	25.8%	44.6%	14.6%	12.6%	2.5%	2767
Putumayo	24.3%	37.8%	17.4%	17.3%	3.1%	4103
Quibdó	28.5%	32.8%	18.8%	16.5%	3.4%	1462
Quindío	26.6%	36.4%	19.2%	16.0%	1.9%	2674
Riohacha	23.1%	36.0%	19.3%	19.1%	2.5%	2508
Rionegro	23.7%	43.3%	17.5%	14.4%	1.0%	1163
Risaralda	24.6%	41.0%	16.7%	15.3%	2.4%	2974
Sabaneta	24.8%	40.7%	15.7%	10.2%	8.6%	568
Sahagún	25.9%	37.7%	17.8%	17.5%	1.0%	1250
San Andrés	26.1%	32.4%	18.9%	21.8%	0.8%	482
Santa Marta	26.5%	38.5%	17.0%	15.7%	2.3%	5685
Santander	23.0%	44.7%	16.7%	14.2%	1.4%	8530
Sincelejo	25.2%	38.1%	17.6%	16.4%	2.7%	3149
Soacha	27.2%	42.1%	16.7%	12.4%	1.6%	5303
Sogamoso	24.7%	46.1%	14.7%	10.7%	3.9%	1529
Soledad	26.1%	44.1%	14.6%	13.8%	1.5%	5391
Sucre	25.3%	32.7%	19.6%	20.6%	1.8%	7455
Tolima	24.3%	38.9%	17.4%	17.1%	2.2%	9818
Tuluá	26.1%	42.2%	17.0%	13.8%	1.0%	2185
Tumaco	23.0%	30.5%	19.5%	22.3%	4.7%	2675
Tunja	25.8%	49.6%	14.0%	9.8%	0.8%	1707
Turbo	25.4%	29.2%	19.1%	22.8%	3.6%	1695
Uribe	23.9%	26.3%	19.9%	25.9%	4.1%	985
Valle del Cauca	26.0%	38.5%	17.4%	15.8%	2.3%	9042
Valledupar	25.2%	39.9%	15.5%	14.9%	4.6%	5256
Vaupés	23.4%	25.9%	23.4%	25.1%	2.1%	239
Vichada	24.5%	31.1%	19.4%	23.1%	2.0%	351
Villavicencio	26.0%	44.0%	15.8%	12.7%	1.5%	5504
Yopal	26.0%	42.8%	16.9%	12.9%	1.3%	1835
Zipaquirá	23.9%	50.1%	15.5%	10.0%	0.4%	1374
Colombia	25.1%	40.7%	16.7%	15.1%	2.3%	484618

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 32.**

Observa la figura.

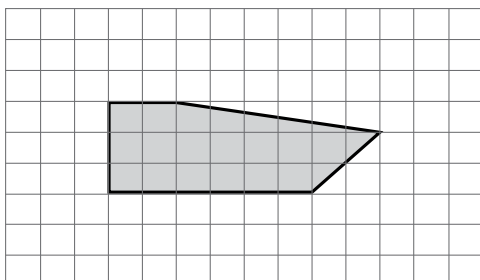


**Figura**

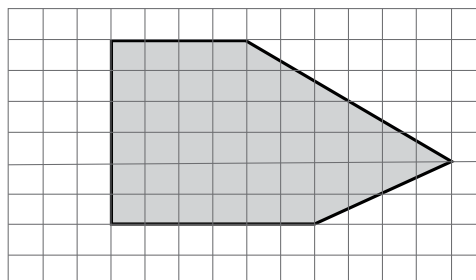
Cada uno de los lados de la figura se reduce a la mitad.

¿Cuál de las siguientes representa la figura reducida?

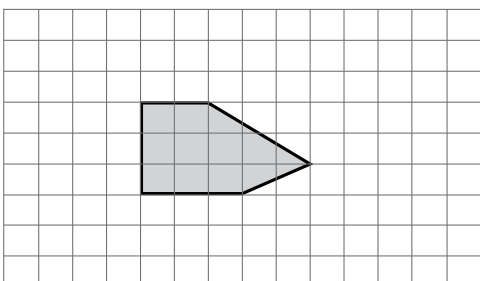
A.



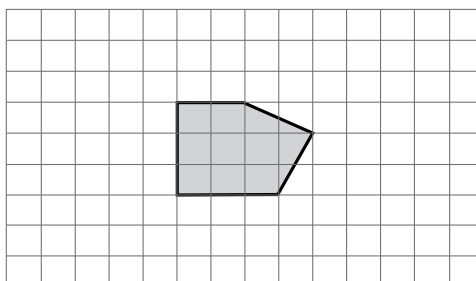
B.



C.



D.







- **Estructura**

<b>Competencia</b>	Razonamiento
<b>Componente</b>	Espacial - métrico
<b>Afirmación</b>	Conjeturar y verificar los resultados de aplicar transformaciones a figuras en el plano.
<b>Nivel de desempeño</b>	Avanzado
<b>Respuesta Correcta</b>	C

- **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	11.7%	52.0%	25.4%	8.8%	2.1%	857
Antioquia	10.5%	43.0%	35.7%	7.3%	3.5%	27715
Apartadó	10.1%	45.2%	36.9%	7.0%	0.8%	1680
Arauca	9.8%	45.8%	35.5%	7.3%	1.6%	2693
Armenia	12.6%	34.8%	45.4%	5.7%	1.6%	2699
Atlántico	10.2%	49.2%	32.1%	6.4%	2.1%	5751
Barrancabermeja	12.7%	39.8%	38.9%	7.3%	1.3%	2577
Barranquilla	11.1%	42.6%	38.3%	6.6%	1.4%	11976
Bello	15.4%	32.3%	43.2%	7.3%	1.8%	3910
Bogotá, D.C.	14.3%	29.8%	48.5%	5.9%	1.4%	66037
Bolívar	9.7%	53.2%	26.3%	7.9%	3.0%	10443
Boyacá	10.4%	42.6%	39.5%	6.3%	1.2%	9413
Bucaramanga	14.0%	29.5%	49.7%	5.4%	1.4%	5472
Buenaventura	8.1%	46.9%	34.3%	7.8%	2.9%	3465
Buga	12.9%	30.2%	47.1%	6.7%	3.1%	1156
Caldas	9.6%	41.1%	40.8%	6.8%	1.7%	5759
Cali	12.9%	32.8%	45.0%	6.8%	2.4%	18794
Caquetá	10.3%	47.6%	31.7%	6.8%	3.5%	3276
Cartagena	11.4%	42.1%	37.3%	7.1%	2.1%	10851
Cartago	14.0%	30.9%	45.6%	6.7%	2.8%	1127
Casanare	10.4%	47.3%	33.8%	6.1%	2.3%	2966
Cauca	8.8%	44.0%	35.3%	7.8%	4.1%	12305
Cesar	9.7%	47.5%	33.9%	7.1%	1.8%	8244
Chocó	10.4%	50.3%	25.2%	9.0%	5.1%	3821
Chía	16.5%	27.0%	50.7%	5.6%	0.2%	1324
Ciénaga	10.8%	43.4%	32.7%	9.1%	4.0%	1362
Cundinamarca	11.7%	36.5%	43.7%	6.1%	2.0%	16080
Córdoba	9.0%	53.0%	27.7%	8.3%	2.0%	13338

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## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Cúcuta	12.4%	38.7%	41.8%	6.5%	0.6%	7496
Dosquebradas	12.7%	30.1%	49.3%	6.7%	1.2%	1719
Duitama	11.2%	21.3%	61.3%	5.4%	0.8%	1261
Envigado	17.9%	20.0%	55.7%	5.7%	0.6%	1433
Facatativá	13.5%	33.2%	46.4%	6.6%	0.4%	1342
Florencia	11.8%	43.9%	36.0%	7.2%	1.2%	1996
Floridablanca	13.7%	26.7%	53.1%	5.8%	0.8%	2565
Fusagasugá	12.8%	37.0%	42.9%	6.6%	0.8%	1396
Girardot	11.8%	51.9%	28.0%	6.9%	1.4%	992
Girón	11.8%	38.5%	42.7%	4.8%	2.2%	1355
Guainía	11.1%	52.4%	24.9%	7.7%	4.0%	506
Guaviare	12.2%	48.5%	28.4%	8.2%	2.7%	819
Huila	8.7%	48.2%	35.7%	6.1%	1.1%	8363
Ibagué	11.7%	36.2%	45.1%	5.8%	1.3%	5165
Ipiales	12.1%	26.6%	53.5%	7.0%	0.9%	1294
Itagüí	15.0%	32.9%	42.4%	8.1%	1.5%	1818
Jamundí	11.9%	40.1%	39.6%	6.9%	1.4%	1115
La Guajira	9.9%	47.1%	32.6%	7.3%	3.2%	3449
Lorica	12.2%	50.0%	26.8%	9.1%	1.8%	1487
Magangué	9.4%	52.1%	28.2%	6.5%	3.9%	1438
Magdalena	10.2%	50.1%	28.3%	8.0%	3.5%	8795
Maicao	11.3%	51.5%	27.8%	8.1%	1.4%	2062
Malambo	10.4%	45.2%	38.0%	4.6%	1.8%	1323
Manizales	13.1%	30.2%	49.7%	5.9%	1.0%	3032
Medellín	15.3%	35.1%	40.3%	7.5%	1.9%	20130
Meta	11.0%	46.1%	34.0%	6.4%	2.5%	5657
Montería	11.3%	48.2%	32.2%	6.8%	1.5%	5225
Mosquera	13.5%	29.5%	51.1%	5.3%	0.6%	1182
Nariño	8.4%	39.7%	42.8%	7.3%	1.9%	9264
Neiva	10.9%	44.7%	37.8%	5.8%	0.8%	3791
Norte de Santander	10.8%	42.0%	38.5%	7.2%	1.6%	7571
Palmira	10.7%	31.3%	49.9%	6.6%	1.4%	2804
Pasto	12.5%	32.2%	47.7%	6.3%	1.3%	4304
Pereira	12.7%	31.4%	48.1%	6.4%	1.4%	4557
Piedecuesta	10.7%	34.3%	47.0%	7.2%	0.7%	1480
Pitalito	12.4%	40.2%	40.7%	5.5%	1.2%	1682
Popayán	11.9%	32.7%	47.3%	6.4%	1.8%	2767
Putumayo	10.6%	41.7%	37.0%	7.6%	3.1%	4103
Quibdó	13.1%	45.6%	28.1%	9.7%	3.5%	1462
Quindío	10.7%	42.0%	39.2%	6.4%	1.7%	2674

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Riohacha	10.5%	48.6%	30.8%	7.6%	2.5%	2508
Rionegro	14.5%	29.6%	49.3%	5.6%	1.0%	1163
Risaralda	10.5%	38.8%	40.5%	8.0%	2.2%	2974
Sabaneta	14.4%	25.4%	45.1%	7.6%	7.6%	568
Sahagún	8.6%	48.6%	36.4%	5.8%	0.5%	1250
San Andrés	9.8%	47.9%	34.0%	7.1%	1.2%	482
Santa Marta	11.3%	44.5%	35.2%	7.1%	1.8%	5685
Santander	9.5%	40.6%	43.4%	5.6%	0.9%	8530
Sincelejo	11.5%	43.4%	35.9%	6.6%	2.6%	3149
Soacha	12.4%	37.6%	42.5%	6.4%	1.1%	5303
Sogamoso	14.0%	26.3%	49.2%	6.9%	3.6%	1529
Soledad	10.9%	41.3%	40.0%	6.6%	1.2%	5391
Sucre	8.9%	53.8%	28.0%	7.4%	1.8%	7455
Tolima	9.6%	48.2%	33.7%	6.5%	2.0%	9818
Tuluá	12.2%	32.8%	47.6%	6.6%	0.8%	2185
Tumaco	11.0%	50.2%	24.1%	9.2%	5.5%	2675
Tunja	12.8%	26.5%	53.8%	6.4%	0.5%	1707
Turbo	10.1%	55.0%	23.3%	7.8%	3.7%	1695
Uribe	10.4%	52.3%	22.0%	9.6%	5.7%	985
Valle del Cauca	11.3%	37.2%	42.2%	7.5%	1.9%	9042
Valledupar	10.0%	40.3%	38.6%	6.6%	4.4%	5256
Vaupés	8.4%	59.8%	17.6%	9.6%	4.6%	239
Vichada	12.3%	48.1%	34.5%	4.8%	0.3%	351
Villavicencio	11.4%	39.9%	42.0%	5.8%	1.1%	5504
Yopal	11.8%	39.8%	41.4%	5.8%	1.2%	1835
Zipaquirá	11.0%	29.8%	53.2%	5.5%	0.4%	1374
Colombia	11.6%	39.9%	39.7%	6.8%	2.0%	484618

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 33.**

En clase de Geometría, Omar tomó y anotó algunas medidas pero olvidó escribir a qué correspondía cada una.

Las medidas que tomó Omar fueron:

- I. 35 gramos.
- II. 10 centímetros (cm).
- III. 72 metros cuadrados ( $m^2$ ).
- IV. 250 centímetros cúbicos ( $cm^3$ ).

¿Cuál de las medidas corresponde al área del piso del salón?

- A. I
- B. II
- C. III
- D. IV

• **Estructura**

<b>Competencia</b>	Comunicación
<b>Componente</b>	Espacial - métrico
<b>Afirmación</b>	Identificar unidades tanto estandarizadas como no convencionales apropiadas para diferentes mediciones y establecer relaciones entre ellas.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	C

• **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	9.6%	15.3%	41.0%	31.0%	3.2%	857
Antioquia	10.1%	14.2%	45.3%	26.6%	3.7%	27715
Apartadó	14.5%	17.0%	41.2%	25.7%	1.5%	1680
Arauca	10.8%	14.8%	47.3%	24.8%	2.2%	2693
Armenia	9.3%	14.9%	46.2%	27.0%	2.6%	2699

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ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Atlántico	11.6%	15.5%	42.8%	27.3%	2.8%	5751
Barrancabermeja	12.5%	14.9%	46.4%	24.5%	1.7%	2577
Barranquilla	12.1%	15.2%	45.5%	25.2%	2.0%	11976
Bello	9.2%	15.4%	45.3%	27.9%	2.3%	3910
Bogotá, D.C.	8.1%	13.0%	51.6%	25.4%	1.9%	66037
Bolívar	13.8%	15.4%	38.9%	28.1%	3.7%	10443
Boyacá	9.4%	12.8%	50.1%	26.0%	1.7%	9413
Bucaramanga	8.1%	14.2%	51.1%	24.9%	1.7%	5472
Buenaventura	13.0%	14.2%	44.8%	24.6%	3.5%	3465
Buga	11.9%	17.0%	44.3%	23.4%	3.4%	1156
Caldas	10.4%	14.3%	46.4%	27.1%	1.9%	5759
Cali	9.6%	15.4%	47.3%	24.6%	3.2%	18794
Caquetá	10.6%	12.2%	49.1%	24.0%	4.1%	3276
Cartagena	11.3%	15.6%	45.1%	25.3%	2.7%	10851
Cartago	12.5%	17.8%	39.4%	26.2%	4.1%	1127
Casanare	10.3%	12.4%	48.6%	25.4%	3.3%	2966
Cauca	8.6%	12.5%	50.7%	23.6%	4.6%	12305
Cesar	13.3%	15.9%	43.7%	24.7%	2.4%	8244
Chocó	12.7%	15.4%	37.4%	29.1%	5.4%	3821
Chía	8.5%	13.3%	55.1%	22.1%	1.0%	1324
Ciénaga	12.4%	13.7%	45.2%	23.8%	5.0%	1362
Cundinamarca	8.2%	12.8%	51.9%	24.7%	2.4%	16080
Córdoba	12.2%	15.2%	42.7%	27.4%	2.4%	13338
Cúcuta	10.9%	15.6%	46.2%	26.2%	1.2%	7496
Dosquebradas	9.3%	16.9%	44.9%	27.4%	1.5%	1719
Duitama	6.9%	12.4%	58.3%	21.3%	1.2%	1261
Envigado	6.5%	12.6%	57.3%	22.3%	1.3%	1433
Facatativá	8.0%	11.8%	50.4%	29.1%	0.7%	1342
Florencia	11.9%	15.5%	45.8%	24.7%	2.1%	1996
Floridablanca	8.1%	13.7%	53.3%	23.8%	1.1%	2565
Fusagasugá	8.3%	14.4%	50.9%	25.1%	1.3%	1396
Girardot	10.7%	13.6%	45.7%	27.9%	2.1%	992
Girón	10.3%	15.4%	45.8%	25.8%	2.6%	1355
Guainía	8.9%	16.0%	40.3%	29.8%	4.9%	506
Guaviare	10.9%	16.6%	42.7%	27.1%	2.7%	819
Huila	9.4%	13.1%	50.2%	25.8%	1.5%	8363
Ibagué	10.5%	13.7%	49.6%	24.3%	1.9%	5165
Ipiales	7.3%	12.9%	54.3%	23.9%	1.7%	1294
Itagüí	12.9%	14.9%	44.3%	25.7%	2.2%	1818
Jamundí	11.2%	16.6%	40.5%	29.4%	2.2%	1115

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## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
La Guajira	12.1%	15.5%	42.8%	26.3%	3.2%	3449
Lorica	13.3%	16.7%	41.8%	25.7%	2.5%	1487
Magangué	12.3%	14.2%	38.4%	30.4%	4.7%	1438
Magdalena	12.8%	15.2%	41.5%	26.3%	4.2%	8795
Maicao	13.1%	16.9%	39.6%	28.4%	2.0%	2062
Malambo	12.4%	12.4%	50.5%	22.1%	2.6%	1323
Manizales	7.7%	14.9%	49.8%	26.4%	1.2%	3032
Medellín	11.7%	16.4%	42.7%	26.7%	2.4%	20130
Meta	10.0%	13.6%	48.5%	25.0%	2.9%	5657
Montería	11.6%	15.4%	43.9%	27.2%	1.9%	5225
Mosquera	7.3%	13.5%	52.4%	25.5%	1.3%	1182
Nariño	8.4%	12.5%	53.4%	23.3%	2.4%	9264
Neiva	11.1%	15.3%	46.5%	25.6%	1.6%	3791
Norte de Santander	9.4%	13.5%	50.5%	24.6%	2.1%	7571
Palmira	10.6%	14.8%	46.6%	26.2%	1.9%	2804
Pasto	8.8%	15.2%	48.3%	26.1%	1.6%	4304
Pereira	9.1%	14.2%	47.6%	27.0%	2.2%	4557
Piedecuesta	8.7%	14.6%	50.5%	24.9%	1.4%	1480
Pitalito	10.2%	14.1%	48.3%	25.9%	1.5%	1682
Popayán	8.9%	14.7%	48.5%	25.1%	2.7%	2767
Putumayo	9.4%	15.5%	46.6%	25.1%	3.4%	4103
Quibdó	13.3%	14.9%	42.5%	25.2%	4.1%	1462
Quindío	9.9%	15.0%	44.9%	27.7%	2.5%	2674
Riohacha	13.0%	16.5%	40.3%	27.4%	2.8%	2508
Rionegro	8.1%	14.1%	50.6%	26.2%	1.0%	1163
Risaralda	9.4%	14.5%	46.7%	26.8%	2.6%	2974
Sabaneta	7.0%	15.3%	49.5%	19.7%	8.5%	568
Sahagún	9.4%	15.7%	46.4%	27.3%	1.2%	1250
San Andrés	16.4%	17.0%	37.6%	27.2%	1.9%	482
Santa Marta	12.5%	16.8%	43.4%	24.6%	2.7%	5685
Santander	8.6%	12.1%	52.7%	25.1%	1.5%	8530
Sincedejo	12.1%	15.9%	44.2%	25.1%	2.7%	3149
Soacha	10.2%	13.6%	47.7%	26.9%	1.6%	5303
Sogamoso	7.4%	15.7%	50.8%	22.2%	4.0%	1529
Soledad	11.5%	15.1%	48.5%	23.1%	1.7%	5391
Sucre	12.9%	15.1%	41.2%	28.7%	2.0%	7455
Tolima	10.6%	13.2%	48.1%	25.6%	2.4%	9818
Tuluá	9.6%	16.2%	47.0%	25.8%	1.4%	2185
Tumaco	14.7%	14.6%	36.3%	28.3%	6.1%	2675
Tunja	8.5%	13.3%	52.5%	24.8%	0.9%	1707

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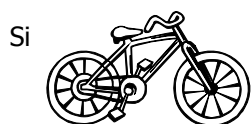


ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Turbo	16.0%	16.3%	34.2%	29.5%	4.0%	1695
Uribe	13.6%	15.2%	37.0%	28.1%	6.1%	985
Valle del Cauca	10.8%	15.6%	45.6%	25.5%	2.5%	9042
Valledupar	11.1%	14.0%	44.7%	25.3%	4.9%	5256
Vaupés	11.7%	10.0%	35.1%	37.2%	5.9%	239
Vichada	11.7%	17.1%	37.3%	33.0%	0.9%	351
Villavicencio	9.6%	14.8%	51.5%	22.7%	1.4%	5504
Yopal	10.2%	13.9%	48.4%	25.8%	1.7%	1835
Zipaquirá	7.6%	12.3%	53.1%	26.3%	0.7%	1374
Colombia	10.3%	14.4%	47.1%	25.7%	2.5%	484618

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 34.**

En un almacén se vendieron 50 bicicletas.




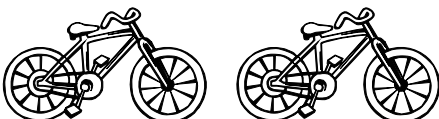


Representa 20 bicicletas y



Representa 10 bicicletas,

¿En cuál de los siguientes conjuntos de figuras se representan las 50 bicicletas vendidas?

- A. 
- B. 
- C. 
- D. 

• **Estructura**

<b>Competencia</b>	Comunicación
<b>Componente</b>	Numérico - variacional
<b>Afirmación</b>	Reconocer diferentes representaciones de un mismo número (natural o fracción) y hacer traducciones entre ellas.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	C





## • Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	34.1%	12.5%	42.1%	8.9%	2.5%	857
Antioquia	27.6%	10.5%	52.3%	6.0%	3.7%	27715
Apartadó	28.8%	10.7%	51.2%	8.1%	1.3%	1680
Arauca	23.7%	9.5%	58.9%	5.8%	2.2%	2693
Armenia	21.0%	11.2%	60.4%	5.3%	2.3%	2699
Atlántico	31.1%	12.1%	46.3%	8.0%	2.6%	5751
Barrancabermeja	24.8%	11.3%	56.1%	5.9%	1.9%	2577
Barranquilla	25.7%	10.1%	56.6%	5.7%	1.9%	11976
Bello	21.0%	10.5%	61.5%	4.8%	2.3%	3910
Bogotá, D.C.	16.9%	8.3%	69.2%	3.9%	1.7%	66037
Bolívar	34.4%	13.8%	38.4%	9.5%	3.8%	10443
Boyacá	23.2%	9.5%	60.6%	5.1%	1.6%	9413
Bucaramanga	17.3%	7.4%	70.0%	3.6%	1.8%	5472
Buenaventura	31.8%	9.9%	47.8%	7.0%	3.5%	3465
Buga	21.4%	11.2%	58.9%	5.4%	3.1%	1156
Caldas	25.9%	9.6%	56.7%	5.8%	2.1%	5759
Cali	20.5%	10.1%	61.5%	5.1%	2.8%	18794
Caquetá	28.4%	9.7%	51.2%	7.0%	3.7%	3276
Cartagena	26.6%	12.1%	51.8%	7.1%	2.5%	10851
Cartago	20.1%	12.1%	58.3%	6.3%	3.3%	1127
Casanare	27.1%	9.4%	54.8%	6.0%	2.7%	2966
Cauca	28.4%	9.5%	51.4%	6.3%	4.5%	12305
Cesar	29.8%	11.9%	47.7%	8.3%	2.3%	8244
Chocó	38.4%	12.7%	34.0%	9.4%	5.5%	3821
Chía	16.3%	7.6%	72.1%	3.5%	0.5%	1324
Ciénaga	31.7%	10.9%	45.9%	7.0%	4.4%	1362
Cundinamarca	18.2%	8.9%	66.1%	4.5%	2.2%	16080
Córdoba	35.0%	12.1%	41.3%	9.0%	2.6%	13338
Cúcuta	22.9%	9.5%	61.4%	5.2%	1.0%	7496
Dosquebradas	21.0%	10.1%	62.6%	5.1%	1.3%	1719
Duitama	12.0%	6.2%	77.5%	3.6%	0.8%	1261
Envigado	12.8%	7.7%	74.6%	4.0%	0.9%	1433
Facatativá	18.4%	9.3%	67.7%	4.1%	0.5%	1342
Florencia	26.0%	11.6%	53.8%	7.0%	1.7%	1996
Floridablanca	15.9%	6.2%	72.9%	3.9%	0.9%	2565
Fusagasugá	23.1%	7.8%	63.0%	4.8%	1.3%	1396
Girardot	32.2%	11.5%	47.2%	7.4%	1.8%	992
Girón	17.7%	8.9%	64.9%	6.2%	2.3%	1355

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## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Guainía	41.3%	13.6%	31.8%	8.7%	4.5%	506
Guaviare	29.9%	10.1%	47.7%	9.4%	2.8%	819
Huila	26.0%	9.9%	57.0%	5.7%	1.4%	8363
Ibagué	17.5%	9.5%	65.8%	5.8%	1.4%	5165
Ipiales	16.2%	8.4%	69.0%	5.1%	1.3%	1294
Itagüí	18.8%	11.8%	60.4%	7.4%	1.7%	1818
Jamundí	25.2%	10.3%	56.2%	6.3%	2.0%	1115
La Guajira	30.3%	11.4%	45.8%	8.8%	3.8%	3449
Lorica	31.6%	12.7%	43.5%	9.8%	2.4%	1487
Magangué	32.5%	10.4%	43.5%	9.6%	4.0%	1438
Magdalena	35.1%	11.9%	39.8%	9.0%	4.2%	8795
Maicao	34.6%	12.5%	43.1%	8.1%	1.7%	2062
Malambo	27.7%	9.3%	55.5%	5.3%	2.2%	1323
Manizales	17.8%	8.9%	67.6%	4.5%	1.2%	3032
Medellín	21.9%	12.0%	56.9%	7.0%	2.2%	20130
Meta	24.3%	10.3%	56.6%	5.9%	2.9%	5657
Montería	30.6%	12.5%	47.5%	7.5%	1.8%	5225
Mosquera	17.9%	8.5%	69.4%	3.4%	0.8%	1182
Nariño	26.3%	8.1%	58.6%	4.7%	2.3%	9264
Neiva	23.1%	10.7%	59.1%	5.8%	1.3%	3791
Norte de Santander	24.8%	9.3%	58.7%	5.4%	1.8%	7571
Palmira	19.4%	10.2%	63.3%	5.6%	1.6%	2804
Pasto	19.1%	8.7%	66.3%	4.6%	1.4%	4304
Pereira	22.8%	9.9%	60.3%	4.8%	2.3%	4557
Piedecuesta	18.0%	9.5%	65.9%	5.1%	1.4%	1480
Pitalito	22.7%	9.5%	60.9%	5.6%	1.4%	1682
Popayán	21.0%	9.1%	63.8%	3.8%	2.3%	2767
Putumayo	24.0%	10.7%	55.8%	6.1%	3.3%	4103
Quibdó	29.5%	12.4%	45.8%	8.1%	4.1%	1462
Quindío	26.1%	11.3%	53.0%	7.4%	2.1%	2674
Riohacha	33.3%	12.0%	44.4%	7.6%	2.8%	2508
Rionegro	16.7%	9.7%	68.5%	4.1%	0.9%	1163
Risaralda	28.0%	9.7%	55.2%	4.6%	2.4%	2974
Sabaneta	14.8%	9.9%	62.3%	5.5%	7.6%	568
Sahagún	30.5%	10.8%	50.6%	7.0%	1.0%	1250
San Andrés	24.7%	18.0%	45.9%	9.5%	1.9%	482
Santa Marta	26.1%	11.3%	53.3%	7.1%	2.2%	5685
Santander	22.3%	9.0%	62.6%	4.8%	1.2%	8530
Sincedejo	27.8%	10.7%	52.3%	6.5%	2.7%	3149
Soacha	21.5%	10.1%	62.3%	4.4%	1.6%	5303

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ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Sogamoso	13.5%	9.4%	69.5%	3.9%	3.9%	1529
Soledad	23.7%	9.8%	59.2%	5.6%	1.7%	5391
Sucre	35.1%	13.0%	40.9%	8.6%	2.4%	7455
Tolima	26.0%	10.7%	54.8%	6.3%	2.1%	9818
Tuluá	20.7%	10.3%	60.5%	7.1%	1.5%	2185
Tumaco	35.3%	14.2%	34.7%	9.4%	6.4%	2675
Tunja	13.6%	8.7%	73.2%	3.6%	0.9%	1707
Turbo	36.8%	13.7%	36.8%	9.1%	3.6%	1695
Uribe	39.9%	15.4%	30.1%	7.9%	6.7%	985
Valle del Cauca	24.7%	11.5%	55.6%	5.8%	2.4%	9042
Valledupar	25.6%	10.1%	53.4%	5.9%	5.1%	5256
Vaupés	44.8%	11.7%	28.5%	9.6%	5.4%	239
Vichada	34.2%	11.1%	47.0%	6.6%	1.1%	351
Villavicencio	17.9%	9.3%	66.5%	5.0%	1.3%	5504
Yopal	20.0%	9.6%	64.0%	4.8%	1.6%	1835
Zipaquirá	18.0%	7.4%	70.0%	3.9%	0.8%	1374
Colombia	24.3%	10.2%	57.2%	5.9%	2.4%	484618

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

• **Pregunta 35.**

Mónica pagó \$50.000 con 25 billetes, todos del mismo valor. ¿Cuál era el valor de cada uno de los billetes?

- A. \$1.000
- B. \$2.000
- C. \$5.000
- D. \$10.000

• **Estructura**

<b>Competencia</b>	Resolución
<b>Componente</b>	Númerico - variacional
<b>Afirmación</b>	Resolver y formular problemas multiplicativos rutinarios y no rutinarios de adición repetida, factor multiplicante, razón y producto cartesiano.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	B

• **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Amazonas	11.2%	31.0%	25.2%	30.0%	2.6%	857
Antioquia	10.1%	46.0%	20.3%	20.0%	3.6%	27715
Apartadó	13.2%	39.5%	20.7%	25.7%	1.0%	1680
Arauca	10.1%	48.1%	19.7%	20.0%	2.2%	2693
Armenia	9.9%	47.1%	22.1%	18.5%	2.4%	2699
Atlántico	11.6%	38.4%	22.7%	24.8%	2.5%	5751
Barrancabermeja	11.4%	44.7%	21.7%	20.2%	1.9%	2577
Barranquilla	9.9%	45.6%	21.4%	21.2%	1.8%	11976
Bello	10.4%	46.4%	22.7%	18.3%	2.2%	3910
Bogotá, D.C.	7.7%	52.0%	21.5%	16.8%	1.9%	66037
Bolívar	13.1%	33.1%	23.8%	26.6%	3.3%	10443
Boyacá	9.0%	50.1%	19.5%	19.6%	1.8%	9413
Bucaramanga	7.6%	57.0%	19.0%	14.6%	1.8%	5472
Buenaventura	10.5%	40.2%	21.4%	24.8%	3.1%	3465
Buga	10.1%	48.4%	19.1%	19.3%	3.0%	1156
Caldas	9.4%	48.8%	19.4%	20.4%	2.0%	5759

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ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Cali	9.2%	47.2%	21.0%	19.7%	2.9%	18794
Caquetá	9.1%	48.4%	19.3%	19.3%	3.8%	3276
Cartagena	10.9%	41.8%	22.9%	22.0%	2.3%	10851
Cartago	9.8%	44.8%	18.3%	24.0%	3.0%	1127
Casanare	9.2%	47.0%	19.8%	21.5%	2.5%	2966
Cauca	9.2%	48.1%	18.2%	20.1%	4.4%	12305
Cesar	11.5%	42.0%	20.8%	23.4%	2.3%	8244
Chocó	12.1%	35.2%	22.8%	24.7%	5.2%	3821
Chía	6.9%	51.1%	24.9%	16.2%	0.9%	1324
Ciénaga	10.3%	44.3%	19.3%	21.7%	4.4%	1362
Cundinamarca	8.1%	52.6%	19.1%	17.8%	2.4%	16080
Córdoba	12.1%	36.6%	23.0%	26.1%	2.2%	13338
Cúcuta	8.8%	50.5%	21.3%	18.5%	0.9%	7496
Dosquebradas	8.8%	52.1%	20.1%	17.3%	1.7%	1719
Duitama	6.7%	60.1%	19.0%	13.3%	0.9%	1261
Envigado	7.0%	60.0%	20.1%	11.9%	0.9%	1433
Facatativá	7.7%	53.7%	20.3%	17.7%	0.6%	1342
Florencia	10.3%	46.4%	21.1%	20.3%	1.8%	1996
Floridablanca	7.1%	58.1%	18.3%	15.2%	1.4%	2565
Fusagasugá	7.5%	50.4%	21.4%	19.3%	1.3%	1396
Girardot	10.2%	41.4%	21.8%	24.7%	1.9%	992
Girón	11.0%	49.7%	18.8%	18.2%	2.4%	1355
Guainía	10.7%	32.0%	22.7%	29.4%	5.1%	506
Guaviare	11.4%	42.2%	20.9%	22.3%	3.2%	819
Huila	8.9%	48.0%	20.1%	21.4%	1.6%	8363
Ibagué	8.3%	52.2%	20.3%	17.6%	1.5%	5165
Ipiales	8.4%	53.0%	20.2%	17.1%	1.3%	1294
Itagüí	10.9%	45.5%	21.1%	20.5%	2.0%	1818
Jamundí	10.1%	43.5%	20.6%	23.9%	1.8%	1115
La Guajira	10.6%	37.4%	24.4%	24.2%	3.5%	3449
Lorica	13.9%	36.7%	21.7%	26.4%	1.5%	1487
Magangué	12.0%	33.0%	25.5%	25.7%	3.8%	1438
Magdalena	11.6%	37.9%	22.0%	24.5%	3.9%	8795
Maicao	11.3%	36.2%	25.0%	26.1%	1.4%	2062
Malambo	10.1%	49.3%	18.4%	19.9%	2.3%	1323
Manizales	7.7%	53.3%	21.6%	16.3%	1.1%	3032
Medellín	11.3%	44.3%	22.3%	19.9%	2.2%	20130
Meta	9.6%	47.3%	19.9%	20.3%	2.9%	5657
Montería	11.8%	37.7%	22.5%	26.4%	1.6%	5225
Mosquera	8.8%	48.1%	24.7%	17.1%	1.4%	1182

Continúa en la siguiente página

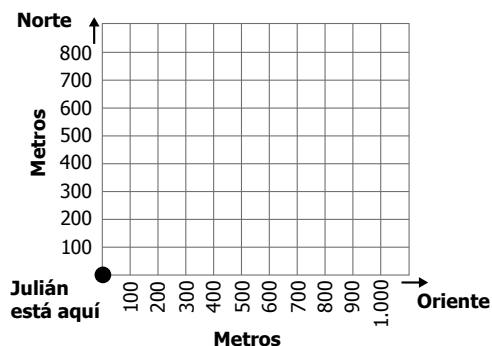
## GRADO 5° - MATEMÁTICAS

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Nariño	8.5%	52.6%	18.7%	18.0%	2.2%	9264
Neiva	8.9%	46.2%	21.8%	21.6%	1.5%	3791
Norte de Santander	9.0%	50.4%	18.7%	20.0%	1.9%	7571
Palmira	9.2%	48.4%	20.4%	20.3%	1.7%	2804
Pasto	8.0%	52.3%	20.8%	17.4%	1.6%	4304
Pereira	9.5%	49.0%	21.0%	18.2%	2.2%	4557
Piedecuesta	9.7%	54.2%	17.3%	17.8%	1.0%	1480
Pitalito	8.9%	51.0%	19.5%	19.1%	1.5%	1682
Popayán	7.4%	52.3%	19.7%	18.3%	2.3%	2767
Putumayo	8.6%	46.5%	18.2%	23.2%	3.5%	4103
Quibdó	13.1%	39.1%	21.3%	22.4%	4.2%	1462
Quindío	10.5%	43.5%	21.5%	22.3%	2.3%	2674
Riohacha	10.3%	38.6%	24.1%	24.3%	2.7%	2508
Rionegro	8.9%	52.3%	21.0%	16.8%	1.0%	1163
Risaralda	9.0%	46.7%	20.4%	21.5%	2.4%	2974
Sabaneta	6.2%	52.5%	18.5%	14.8%	8.1%	568
Sahagún	11.6%	41.3%	22.1%	24.0%	1.0%	1250
San Andrés	13.1%	30.5%	25.5%	29.5%	1.5%	482
Santa Marta	10.3%	42.1%	22.2%	23.1%	2.3%	5685
Santander	8.4%	54.3%	19.1%	17.1%	1.2%	8530
Sincelejo	10.5%	41.1%	22.8%	22.8%	2.7%	3149
Soacha	9.5%	46.7%	22.9%	19.3%	1.6%	5303
Sogamoso	6.3%	52.4%	20.5%	16.7%	4.1%	1529
Soledad	11.3%	46.4%	21.3%	19.5%	1.5%	5391
Sucre	12.1%	35.5%	24.7%	25.8%	1.9%	7455
Tolima	9.7%	45.4%	21.2%	21.6%	2.2%	9818
Tuluá	9.2%	48.4%	21.2%	19.8%	1.5%	2185
Tumaco	12.4%	31.6%	24.2%	25.8%	6.0%	2675
Tunja	6.7%	54.1%	21.5%	16.7%	0.9%	1707
Turbo	13.0%	30.8%	24.2%	28.3%	3.6%	1695
Uribe	10.2%	26.2%	25.7%	32.2%	5.8%	985
Valle del Cauca	10.0%	45.8%	20.3%	21.7%	2.2%	9042
Valledupar	10.1%	41.9%	21.0%	22.2%	4.7%	5256
Vaupés	9.2%	20.5%	21.3%	43.9%	5.0%	239
Vichada	10.8%	39.3%	21.4%	27.9%	0.6%	351
Villavicencio	8.4%	53.1%	19.3%	17.8%	1.5%	5504
Yopal	8.8%	50.0%	21.5%	17.8%	1.9%	1835
Zipaquirá	7.7%	57.2%	19.1%	15.4%	0.7%	1374
Colombia	9.6%	46.6%	21.1%	20.4%	2.4%	484618

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

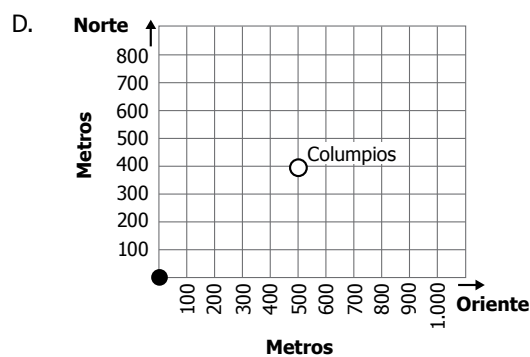
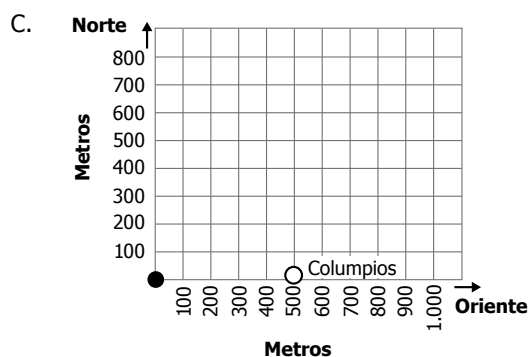
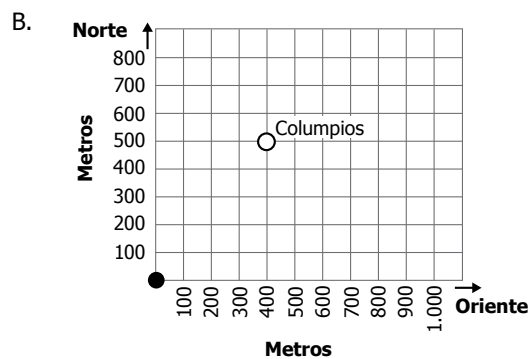
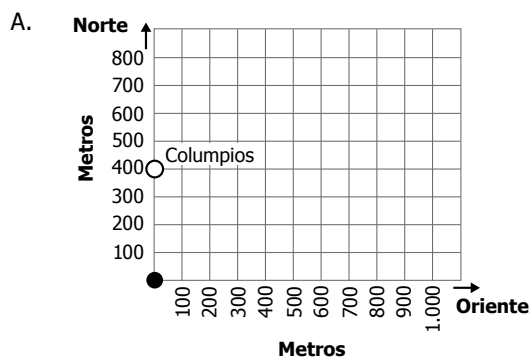
• **Pregunta 36.**

En el siguiente plano de un parque se muestra la ubicación de Julián.



Para llegar a los columpios, Julián debe caminar 400 m hacia el norte y a continuación 500 m hacia el oriente.

¿En cuál de los siguientes planos se muestra la ubicación correcta de los columpios?



• Estructura

<b>Competencia</b>	Razonamiento
<b>Componente</b>	Espacial - métrico
<b>Afirmación</b>	Conjeturar y verificar los resultados de aplicar transformaciones a figuras en el plano.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	D

• Resultados a nivel nacional y de Entidad Territorial certificada (ETC)

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	21.2%	28.2%	22.3%	25.6%	2.7%	857
Antioquia	18.6%	21.8%	16.5%	39.4%	3.6%	27715
Apartadó	19.7%	25.2%	18.8%	35.1%	1.3%	1680
Arauca	16.6%	21.4%	15.4%	44.5%	2.1%	2693
Armenia	18.6%	20.8%	12.7%	45.4%	2.5%	2699
Atlántico	20.9%	24.3%	20.0%	32.1%	2.7%	5751
Barrancabermeja	19.6%	21.8%	15.8%	40.9%	1.9%	2577
Barranquilla	19.7%	21.8%	14.0%	42.7%	1.8%	11976
Bello	20.6%	21.3%	12.0%	43.6%	2.5%	3910
Bogotá, D.C.	14.4%	18.4%	10.2%	55.1%	2.0%	66037
Bolívar	20.0%	26.2%	22.7%	27.8%	3.4%	10443
Boyacá	16.0%	20.6%	14.9%	47.0%	1.5%	9413
Bucaramanga	15.0%	17.0%	10.5%	55.7%	1.8%	5472
Buenaventura	22.0%	21.4%	18.5%	34.9%	3.2%	3465
Buga	17.0%	21.8%	12.7%	45.3%	3.2%	1156
Caldas	17.5%	21.8%	16.2%	42.5%	2.0%	5759
Cali	17.9%	20.1%	12.5%	46.6%	3.0%	18794
Caquetá	18.0%	20.8%	17.0%	40.4%	3.7%	3276
Cartagena	20.0%	22.7%	16.9%	37.8%	2.6%	10851
Cartago	16.8%	22.6%	15.3%	42.0%	3.4%	1127
Casanare	19.2%	21.0%	16.4%	40.7%	2.7%	2966
Cauca	16.9%	20.6%	15.0%	42.8%	4.6%	12305
Cesar	18.3%	24.3%	17.9%	37.1%	2.4%	8244
Chocó	20.3%	24.2%	22.5%	27.5%	5.6%	3821
Chía	13.1%	19.7%	9.3%	57.4%	0.5%	1324
Ciénaga	22.2%	22.6%	15.9%	34.7%	4.6%	1362
Cundinamarca	14.8%	19.2%	12.9%	50.8%	2.2%	16080
Córdoba	20.2%	24.8%	21.4%	31.3%	2.4%	13338

Continúa en la siguiente página





ETC/País	A	B	C	D	Omisión y multimarca	Nº estudiantes
Cúcuta	16.7%	20.9%	13.8%	47.7%	0.9%	7496
Dosquebradas	17.4%	22.6%	10.8%	47.6%	1.7%	1719
Duitama	10.7%	17.8%	9.4%	61.0%	1.0%	1261
Envigado	12.5%	19.6%	8.3%	58.3%	1.3%	1433
Facatativá	16.2%	21.4%	11.1%	50.6%	0.7%	1342
Florencia	16.8%	21.9%	16.3%	43.1%	1.9%	1996
Floridablanca	15.8%	17.9%	9.9%	55.2%	1.2%	2565
Fusagasugá	15.6%	22.9%	11.8%	48.3%	1.4%	1396
Girardot	20.1%	26.8%	15.9%	35.3%	1.9%	992
Girón	16.2%	21.5%	13.2%	46.3%	2.7%	1355
Guainía	16.8%	27.5%	20.6%	30.4%	4.7%	506
Guaviare	20.9%	23.4%	17.9%	35.0%	2.7%	819
Huila	16.9%	21.0%	15.9%	44.6%	1.6%	8363
Ibagué	15.7%	20.3%	12.6%	49.8%	1.6%	5165
Ipiales	14.6%	20.6%	10.7%	52.8%	1.4%	1294
Itagüí	16.8%	25.1%	16.2%	40.1%	1.8%	1818
Jamundí	19.6%	22.8%	16.3%	39.7%	1.6%	1115
La Guajira	19.9%	24.7%	20.2%	32.0%	3.1%	3449
Lorica	21.5%	24.7%	19.9%	31.2%	2.8%	1487
Magangué	20.0%	25.1%	19.9%	31.2%	3.9%	1438
Magdalena	20.2%	25.2%	20.5%	30.0%	4.1%	8795
Maicao	20.2%	25.2%	20.1%	32.9%	1.5%	2062
Malambo	18.3%	20.1%	15.0%	44.5%	2.1%	1323
Manizales	16.1%	18.6%	11.7%	52.4%	1.3%	3032
Medellín	18.0%	24.1%	16.1%	39.5%	2.2%	20130
Meta	17.2%	21.4%	16.4%	42.3%	2.7%	5657
Montería	19.9%	25.5%	16.9%	36.1%	1.6%	5225
Mosquera	14.4%	18.7%	10.7%	55.0%	1.3%	1182
Nariño	16.6%	19.8%	13.5%	47.8%	2.2%	9264
Neiva	17.8%	20.8%	15.2%	44.9%	1.4%	3791
Norte de Santander	16.9%	20.3%	15.4%	45.5%	2.0%	7571
Palmira	16.0%	19.2%	12.4%	50.6%	1.8%	2804
Pasto	14.6%	20.6%	10.3%	53.1%	1.4%	4304
Pereira	17.8%	20.2%	12.8%	46.9%	2.2%	4557
Piedecuesta	14.5%	18.3%	13.8%	52.4%	1.0%	1480
Pitalito	19.3%	20.7%	15.7%	42.4%	1.9%	1682
Popayán	14.7%	20.8%	11.6%	50.5%	2.5%	2767
Putumayo	15.8%	22.2%	17.5%	41.2%	3.4%	4103
Quibdó	18.8%	24.6%	19.3%	33.5%	3.8%	1462
Quindío	19.4%	22.4%	15.9%	39.9%	2.3%	2674

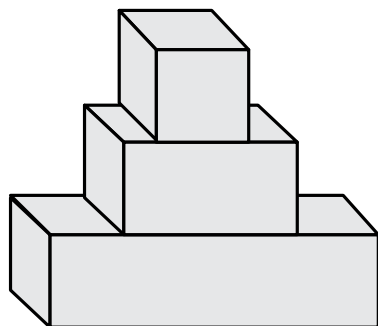
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ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Riohacha	20.3%	23.2%	18.9%	34.6%	3.0%	2508
Rionegro	16.3%	19.3%	12.7%	50.6%	0.9%	1163
Risaralda	18.8%	20.5%	15.4%	42.7%	2.6%	2974
Sabaneta	15.5%	18.8%	9.9%	47.7%	8.1%	568
Sahagún	17.0%	25.0%	17.5%	39.4%	1.1%	1250
San Andrés	19.1%	28.0%	21.6%	29.7%	1.7%	482
Santa Marta	21.5%	23.0%	15.4%	37.9%	2.2%	5685
Santander	15.4%	20.0%	13.0%	50.2%	1.3%	8530
Sincelejo	19.7%	22.8%	16.0%	38.8%	2.7%	3149
Soacha	17.2%	21.2%	12.1%	48.0%	1.6%	5303
Sogamoso	14.1%	20.3%	10.1%	51.6%	3.9%	1529
Soledad	17.8%	22.1%	13.4%	45.2%	1.6%	5391
Sucre	19.8%	23.7%	22.2%	32.3%	2.0%	7455
Tolima	16.9%	22.1%	16.8%	41.9%	2.4%	9818
Tuluá	18.9%	20.7%	14.3%	44.8%	1.3%	2185
Tumaco	20.3%	25.1%	21.4%	26.7%	6.5%	2675
Tunja	13.9%	19.3%	10.3%	55.6%	0.8%	1707
Turbo	23.2%	25.6%	22.8%	24.0%	4.4%	1695
Uribe	19.2%	25.2%	21.4%	27.6%	6.6%	985
Valle del Cauca	18.3%	21.6%	15.4%	42.3%	2.4%	9042
Valledupar	19.3%	20.8%	15.5%	39.4%	5.0%	5256
Vaupés	17.6%	26.8%	19.2%	31.0%	5.4%	239
Vichada	22.8%	22.5%	20.5%	33.0%	1.1%	351
Villavicencio	16.6%	20.6%	12.6%	48.7%	1.5%	5504
Yopal	14.9%	21.2%	15.1%	46.9%	1.9%	1835
Zipaquirá	14.6%	17.4%	11.1%	56.1%	0.9%	1374
Colombia	17.5%	21.4%	14.9%	43.8%	2.4%	484618

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

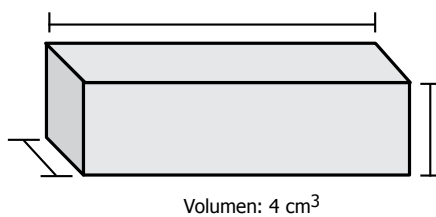
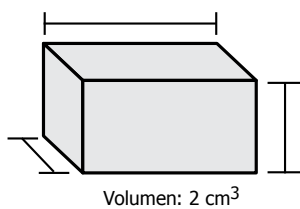
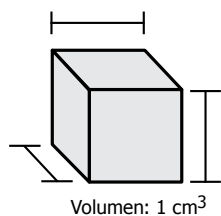
• **Pregunta 37.**

Observa la torre de la figura 1.



**Figura 1**

La torre se construyó con los tres bloques de la figura 2.



**Figura 2**

¿Cuál es el volumen de la torre?

- A.  $4 \text{ cm}^3$ .
- B.  $7 \text{ cm}^3$ .
- C.  $8 \text{ cm}^3$ .
- D.  $13 \text{ cm}^3$ .

• **Estructura**

<b>Competencia</b>	Resolución
<b>Componente</b>	Espacial - métrico
<b>Afirmación</b>	Usar representaciones geométricas y establecer relaciones entre ellas para solucionar problemas.
<b>Nivel de desempeño</b>	Satisfactorio
<b>Respuesta Correcta</b>	B

• **Resultados a nivel nacional y de Entidad Territorial certificada (ETC)**

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Amazonas	23.8%	42.6%	16.7%	13.7%	3.3%	857
Antioquia	20.0%	52.8%	13.6%	9.7%	4.0%	27715
Apartadó	22.4%	52.7%	13.5%	10.0%	1.4%	1680
Arauca	17.3%	58.7%	13.9%	7.6%	2.6%	2693
Armenia	15.2%	62.0%	11.8%	8.3%	2.7%	2699
Atlántico	22.0%	50.0%	14.0%	11.0%	3.0%	5751
Barrancabermeja	17.7%	57.4%	14.2%	8.7%	2.0%	2577
Barranquilla	17.5%	59.9%	12.6%	8.1%	1.9%	11976
Bello	15.6%	61.0%	12.4%	8.5%	2.5%	3910
Bogotá, D.C.	12.4%	64.8%	12.9%	7.7%	2.1%	66037
Bolívar	24.8%	43.7%	16.0%	11.9%	3.6%	10443
Boyacá	15.6%	57.9%	15.1%	9.5%	1.9%	9413
Bucaramanga	11.1%	67.2%	13.5%	6.2%	2.0%	5472
Buenaventura	25.1%	50.8%	12.1%	8.7%	3.3%	3465
Buga	15.6%	61.3%	11.0%	8.7%	3.5%	1156
Caldas	18.8%	57.5%	12.4%	9.1%	2.1%	5759
Cali	15.2%	60.8%	13.2%	7.6%	3.2%	18794
Caquetá	23.1%	52.2%	11.1%	9.5%	4.1%	3276
Cartagena	20.0%	53.6%	13.9%	9.7%	2.8%	10851
Cartago	15.9%	57.9%	13.9%	8.6%	3.6%	1127
Casanare	18.5%	57.5%	12.5%	8.5%	2.9%	2966
Cauca	21.8%	52.3%	11.8%	9.4%	4.7%	12305
Cesar	21.2%	50.4%	14.8%	11.2%	2.4%	8244
Chocó	29.9%	38.1%	13.7%	12.8%	5.5%	3821
Chía	9.7%	68.6%	13.0%	7.8%	1.0%	1324
Ciénaga	25.1%	45.1%	15.8%	9.1%	4.9%	1362
Cundinamarca	14.1%	64.0%	12.0%	7.5%	2.3%	16080
Córdoba	25.6%	46.2%	13.9%	11.7%	2.6%	13338

Continúa en la siguiente página



ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Cúcuta	15.2%	62.7%	12.8%	8.1%	1.2%	7496
Dosquebradas	14.2%	63.4%	12.1%	8.6%	1.7%	1719
Duitama	9.4%	70.3%	11.7%	7.5%	1.1%	1261
Envigado	9.5%	68.2%	13.4%	7.6%	1.3%	1433
Facatativá	13.5%	64.1%	13.9%	7.7%	0.8%	1342
Florencia	19.9%	56.5%	12.7%	9.1%	1.8%	1996
Floridablanca	11.2%	67.9%	13.2%	6.3%	1.4%	2565
Fusagasugá	13.0%	62.9%	14.3%	7.9%	1.9%	1396
Girardot	21.4%	50.2%	14.9%	10.8%	2.7%	992
Girón	15.4%	62.2%	11.5%	8.3%	2.7%	1355
Guainía	20.8%	46.0%	15.2%	13.8%	4.2%	506
Guaviare	19.3%	54.6%	11.6%	12.1%	2.4%	819
Huila	18.5%	58.5%	12.4%	9.0%	1.6%	8363
Ibagué	14.9%	63.2%	12.5%	7.5%	1.9%	5165
Ipiales	13.3%	64.6%	12.6%	8.0%	1.5%	1294
Itagüí	16.1%	55.7%	16.2%	10.2%	1.8%	1818
Jamundí	21.7%	57.4%	10.7%	8.5%	1.7%	1115
La Guajira	24.7%	46.2%	15.0%	10.3%	3.7%	3449
Lorica	22.9%	44.7%	18.6%	11.3%	2.6%	1487
Magangué	24.3%	48.0%	13.1%	10.6%	4.0%	1438
Magdalena	26.9%	43.9%	13.5%	11.8%	3.9%	8795
Maicao	25.7%	44.3%	16.6%	11.1%	2.3%	2062
Malambo	18.7%	59.6%	12.4%	7.3%	2.0%	1323
Manizales	13.7%	65.3%	10.7%	8.9%	1.5%	3032
Medellín	15.7%	56.3%	15.0%	10.5%	2.5%	20130
Meta	17.6%	58.7%	12.7%	8.1%	3.0%	5657
Montería	21.0%	52.8%	14.0%	10.3%	2.0%	5225
Mosquera	12.2%	66.8%	12.1%	8.0%	0.9%	1182
Nariño	18.9%	58.6%	11.6%	8.5%	2.3%	9264
Neiva	16.4%	61.0%	12.5%	8.7%	1.4%	3791
Norte de Santander	18.5%	58.9%	12.4%	8.1%	2.0%	7571
Palmira	13.8%	63.5%	12.9%	7.9%	2.0%	2804
Pasto	12.2%	65.1%	12.9%	8.2%	1.6%	4304
Pereira	15.5%	62.9%	11.9%	7.4%	2.3%	4557
Piedecuesta	12.2%	65.2%	14.3%	7.2%	1.1%	1480
Pitalito	16.1%	61.7%	11.4%	9.2%	1.7%	1682
Popayán	12.5%	64.9%	12.1%	8.0%	2.5%	2767
Putumayo	18.9%	55.0%	13.5%	9.1%	3.6%	4103
Quibdó	23.3%	47.3%	15.0%	10.7%	3.8%	1462
Quindío	17.8%	55.3%	14.3%	10.2%	2.5%	2674

ETC/País	A	B	C	D	Omisión y multimarca	N° estudiantes
Riohacha	25.6%	46.8%	14.3%	10.1%	3.2%	2508
Rionegro	12.6%	64.9%	13.2%	8.1%	1.2%	1163
Risaralda	18.5%	58.6%	11.4%	8.6%	2.9%	2974
Sabaneta	14.3%	62.7%	10.4%	5.1%	7.6%	568
Sahagún	20.2%	56.9%	13.8%	8.2%	1.0%	1250
San Andrés	21.8%	46.7%	19.5%	9.5%	2.5%	482
Santa Marta	20.4%	55.0%	13.6%	8.4%	2.6%	5685
Santander	15.8%	61.4%	13.1%	8.1%	1.5%	8530
Sincelejo	18.3%	56.3%	12.5%	9.9%	3.0%	3149
Soacha	15.2%	64.2%	12.2%	6.7%	1.6%	5303
Sogamoso	10.9%	64.0%	13.6%	7.7%	3.9%	1529
Soledad	16.8%	61.5%	12.4%	7.4%	1.9%	5391
Sucre	25.4%	45.8%	14.2%	11.9%	2.6%	7455
Tolima	20.6%	54.9%	13.1%	8.9%	2.5%	9818
Tuluá	16.1%	62.2%	13.0%	7.4%	1.5%	2185
Tumaco	29.4%	36.7%	14.0%	13.7%	6.2%	2675
Tunja	10.9%	62.6%	17.5%	8.2%	0.8%	1707
Turbo	30.8%	39.4%	13.7%	12.5%	3.7%	1695
Uribe	28.1%	36.9%	15.0%	14.0%	6.0%	985
Valle del Cauca	17.7%	57.3%	13.1%	9.2%	2.7%	9042
Valledupar	19.2%	55.7%	12.0%	7.8%	5.2%	5256
Vaupés	29.7%	31.4%	15.9%	17.6%	5.4%	239
Vichada	23.4%	51.9%	14.2%	9.1%	1.4%	351
Villavicencio	14.2%	64.8%	12.3%	6.8%	1.9%	5504
Yopal	15.3%	61.5%	12.1%	8.8%	2.3%	1835
Zipaquirá	12.5%	66.4%	12.5%	7.3%	1.3%	1374
Colombia	17.8%	57.4%	13.2%	9.0%	2.6%	484618

\*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.



