

Tennessee TCAP 2021  
Grade 5 Math

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# Tennessee Comprehensive Assessment Program

# TCAP

## Math Grade 5 Item Release



- 00.** Dennis needs  $\frac{1}{2}$  cup of milk to make 1 batch of a pancake recipe.

How many **fluid ounces** of milk does Dennis need to make 3 batches of pancakes using this recipe?

- A.** 4
- B.** 8
- C.** 12
- D.** 24

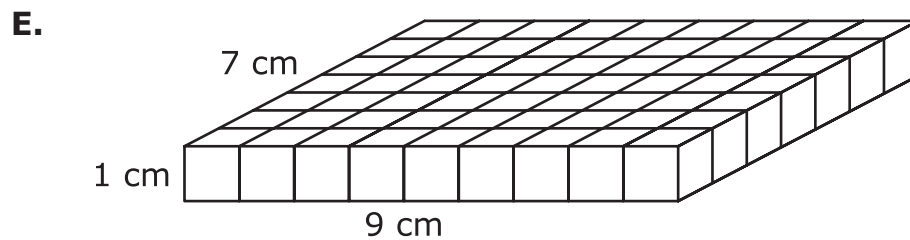
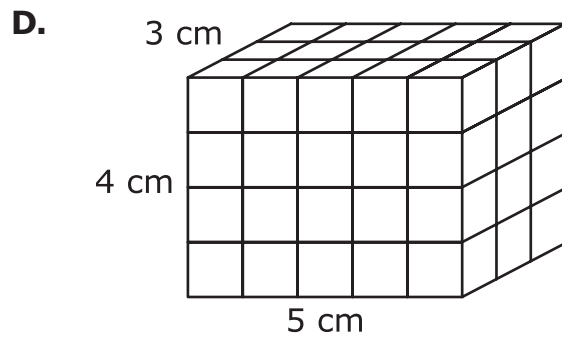
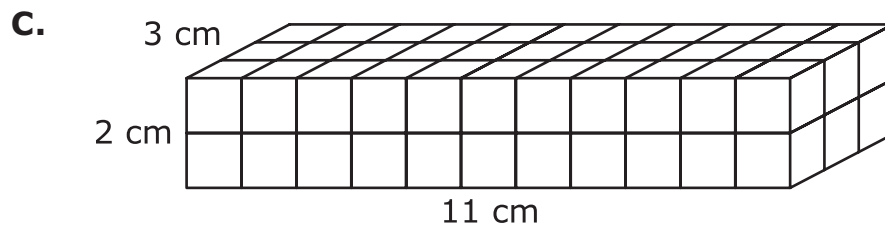
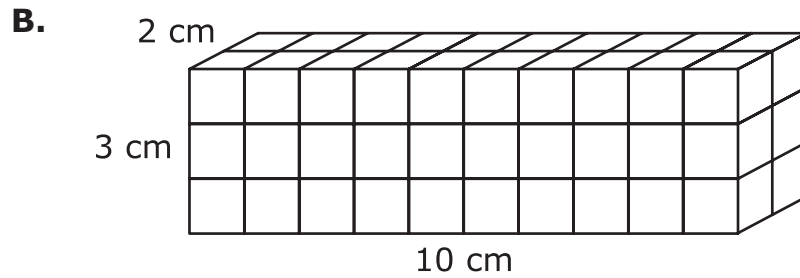
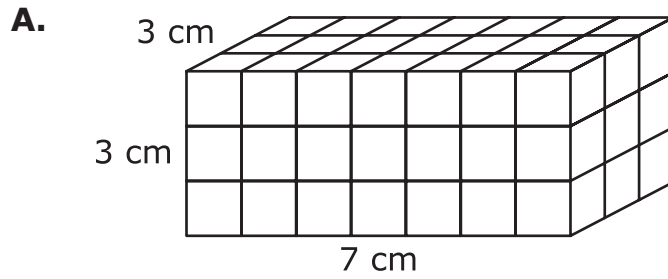
**00.** Dale made fruit punch. The list shows the ingredients he used to make the punch.

- $\frac{1}{4}$  liter cranberry juice
- $\frac{2}{3}$  liter apple juice
- $\frac{4}{5}$  liter sparkling water

How many liters of fruit punch did Dale make?

- A.**  $\frac{7}{12}$
- B.**  $\frac{11}{12}$
- C.**  $1\frac{3}{60}$
- D.**  $1\frac{43}{60}$

**00.** Select the **two** rectangular prisms that have a volume of 60 cubic centimeters.



- 00.** Consider the number 14,554.336.

What should the 5 in the hundreds place be multiplied by to get the same value as the 5 in the tens place?

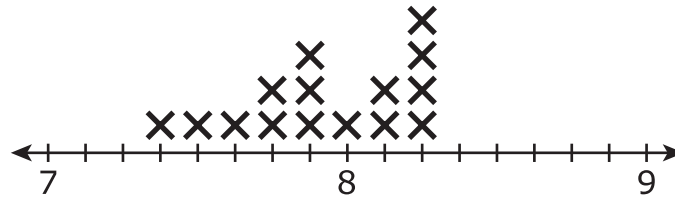
**A.**  $\frac{1}{100}$

**B.**  $\frac{1}{10}$

**C.** 10

**D.** 100

- 00.** A skateboarding club measured the widths of 15 skateboards. They created a line plot to show their data.



**Skateboard Widths (inches)**

What is the difference, in inches, between the two most common widths?

- A.**  $\frac{1}{4}$
- B.**  $\frac{3}{8}$
- C.**  $\frac{5}{8}$
- D.**  $1\frac{1}{2}$

- 00.** Which statement describes how to calculate  $36 \div (4 + 2)$ ?
- A.** Divide 4 by 36, then add 2.
  - B.** Divide 36 by 4, then add 2.
  - C.** Add 4 and 2, then divide 36 by the sum.
  - D.** Add 4 and 2, then divide the sum by 36.



**00.** A set of ordered pairs is created using these two rules.

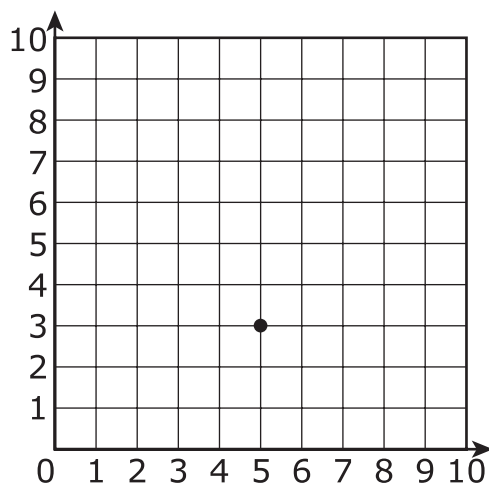
- The  $x$ -coordinate in the set starts with 0 and increases by 2.
- The corresponding  $y$ -coordinate in the set starts with 0 and increases by 3.

Which ordered pairs belong in this set?

Select the **three** correct answers.

- A.** (2, 3)
- B.** (4, 6)
- C.** (6, 12)
- D.** (10, 15)
- E.** (11, 18)

- 00.** A point is plotted on the coordinate plane shown.



Which ordered pair represents a point 3 units closer to the  $x$ -axis and 1 unit farther away from the  $y$ -axis than the point shown?

- A.** (0, 6)
- B.** (6, 0)
- C.** (2, 4)
- D.** (4, 2)

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- 00.** There are 2,625 students who attend Redford Middle School. The principal must hire a teacher for every 25 students.

How many teachers must be hired?

- A.** 11
- B.** 15
- C.** 105
- D.** 150

- 00.** James is multiplying several numbers by a number  $n$ .

Which set of factors, when individually multiplied by  $n$ , will always result in a product less than  $n$ ?

**A.**  $1\frac{1}{2}, 2\frac{1}{4}, 3\frac{2}{5}$

**B.**  $1, 3, 10$

**C.**  $\frac{4}{7}, \frac{5}{5}, \frac{6}{3}$

**D.**  $\frac{1}{2}, \frac{3}{4}, \frac{10}{12}$

- 00.** Sam ran  $1\frac{3}{4}$  miles on Tuesday. On Wednesday, she ran  $\frac{2}{3}$  of the distance that she ran on Tuesday.

How many miles did Sam run on Wednesday?

- A.**  $2\frac{5}{12}$
- B.**  $1\frac{1}{12}$
- C.**  $1\frac{1}{6}$
- D.**  $2\frac{5}{8}$

- 00.** Deb has a ribbon that is 4 yards long. She cuts the ribbon into pieces that are each  $\frac{1}{8}$  of a yard in length.

How many pieces of ribbon will she have?

**A.**  $\frac{1}{32}$

**B.**  $\frac{4}{8}$

**C.** 8

**D.** 32

- 00.** Which statement is true based on the reason given?
- A.** All rectangles are parallelograms because the opposite sides are always parallel.
  - B.** All rectangles are parallelograms because their angles add up to 360 degrees.
  - C.** All squares are rhombuses because opposite angles are the same size.
  - D.** All squares are rhombuses because they are quadrilaterals.

- 00.** Which statement shows 8.429 rounded to the nearest tenth and the explanation for how it is rounded?
- A.** It is 8.3 because the hundredths digit is less than 5.
  - B.** It is 8.4 because the hundredths digit is less than 5.
  - C.** It is 8.4 because the thousandths digit is 5 or greater.
  - D.** It is 8.5 because the thousandths digit is 5 or greater.



- 00.** The manager of a restaurant chain bought 3,175 chairs. Each chair cost \$61.

What was the total cost of the chairs?

- A.** \$189,375
- B.** \$189,675
- C.** \$193,375
- D.** \$193,675

## Metadata- Math

### Items

Page Number	UIN	Grade	Item Type	Key	DOK	TN Standards	Calculator
4	TN0007259	05	MC	C	2	5.MD.A.1	Y
5	TN0011393	05	MC	D	2	5.NF.A.2	Y
6	TN0011410	05	MS	B,D	2	5.MD.C.5a	Y
7	TN0014415	05	MC	B	2	5.NBT.A.1	Y
8	TN0019779	05	MC	B	2	5.MD.B.2	Y
9	TN0025177	05	MC	C	1	5.OA.A.2	Y
10	TN0069077	05	MS	A,B,D	2	5.OA.B.3b	N
11	TN175197	05	MC	B	2	5.G.A.1	Y
12	TN175218	05	MC	C	2	5.NBT.B.6	Y
13	TN175262	05	MC	D	3	5.NF.B.5a	Y
14	TN175268	05	MC	C	2	5.NF.B.6	N
15	TN175272	05	MC	D	2	5.NF.B.7b	N
16	TN175351	05	MC	A	2	5.G.B.3	N
17	TN354480	05	MC	B	1	5.NBT.A.4	Y
18	TN951564	05	MC	D	1	5.NBT.B.5	N

### Metadata Definitions:

<b>UIN</b>	Unique letter/number code used to identify the item.
<b>Grade</b>	Grade level or Course.
<b>Item Type</b>	Indicates the type of item. MC= Multiple Choice; MS= Multiple Select
<b>Key</b>	Correct answer. This may be blank for constructed response items where students write or type their responses.
<b>DOK</b>	Depth of Knowledge (cognitive complexity) is measured on a three-point scale. 1 = Recall or simple reproduction of information; 2 = Skills and concepts: comprehension and processing of text; 3 = Strategic thinking, prediction, elaboration.
<b>TN Standards</b>	Primary educational standard assessed.
<b>Calculator</b>	Y for items that permit calculator use.