NAME : _____

CLASS : _____

DATE : _____

algebra
20 Questions

1. El resultado de multiplicar (3x-2)(3x+2) es:

A $9x^2+12x-4$

B $9x^2 - 4$

C $9x^2-12x+4$

D $9x^2+4$

2. Opera:
$(x^2+5x-2)(4x+3)$ =

A x^3+23x^2+7x-6

B $4x^3+23x^2+7x-6$

C $4x^3+3x^2+7x-6$

3. Opera y reduce:
$3x(2x^2-4x+2)-(5x^2 -7x -8)$=

A $6x^3 + 7x^2 - 13x + 8$

B $x^2 - 19x - 2x$

C $6x^3 -17x^2 + 13x + 8$

D $5x^3 - 19x^2 - x - 8$

4. Efectúa la siguiente división:
15xyz : 3xy=

A 15z

B 5xy

C 5xyz

D 5z

5. Multiplica: $2x(x+1)$

A $2x^3 + 1$

B $2x+2$

C $2x^2 + 2x$

D $2x$

6. $2x \cdot 5x^3 \cdot (-2x^7)$

A $5x^{11}$

B $-20x^{10}$

C $5x^{10}$

D $-20x^{11}$

7. La suma de coeficientes del producto, es :

$(x^2 - 2x - 1).(x^2 + 3x)$

A 7

B -10

C -8

D 6

8. EFECTUAR :

$(x-2)(2+x)+4$

A 2X

B X^3

C $4x^2$

D X^2

9. REDUCIR :

$M = 5a(b+c) - 5b(a+c) - 5c(a+b)$

A -10ba

B -10bc

C ba

D -bc

10. Si: $P_{(y)} = 2y^2 - 5y + 4$; $Q_{(y)} = 3y^2 - 7y + 6$
Calcular: $3P_{(y)} - 2Q_{(y)}$

A -y

B y

C 2y

D 3y+2

11. Reducir: $2(x + 4) - 3(x + 3) + 4(x - 2)$

A 2x-4

B 3x-9

C x-8

D 5x+1

12. RESOLVER :

$$\frac{5x^7 - 10x^3 + 15x^2}{5x^2}$$

A x^5-5x+$3x^2$

B x^5-2x+3

C x^9-2x+3

D x-3

13. Hallar el área del rectángulo mostrado :

A $12x^4+15x^3-x^2+10x-6$

B $7x^2+10x-6$

C $x^4+15x^3-x^2+10x-9$

D $5x^3+15x^2-x$

14. Multiplicar:

$(2a)(3b)(-4abc)(c^2)$

A $-12a^2b^2c$

B $8ab^2c^3$

C $7a^2bc^3$

D $-24a^2b^2c^3$

15.

Dividir :

$(33m^2n^6 + 11mn) \div 11mn$

A n^5+1

B mn^3-2

C $3mn^5+1$

D $3m^3n^7+1$

16. Hallar el área de un cuadrado cuyo lado mide $2x^2y^3$

A $8x^4y^6$

B $4x^4y^6$

C $4x^2y^3$

D $-x^4y^6$

17. Si el área de un rectángulo es $144a^5b^7c^3$ y su ancho mide $9a^3b^3c^3$. Hallar la medida de su largo.

A $8a^2b^3$

B $6a^2$

C $16a^2b^4$

D a^8b^4

18. Si el lado de un cuadrado mide $4a^3b^4c$. Hallar su perímetro

A b^4c

B $16abc$

C $16a^3b^4c$

D $5a^3bc$

19. Resolver lo siguiente: $150\ a^7b^4c^2 : 5\ a^5b^3c^2$

A $15a^2b^3$

B $30b$

C $22a^2c$

D $30a^2b$

20.

Resolver :

$$R = \frac{39x^{42}y^{37}z^{27}}{3x^{25}y^{14}z^{19}}$$

A $13x^{17}y^{23}z^{8}$

B $10x^{15}y^{23}z^{6}$

C $15x^{17}y^{27}z^{8}$

D $13x^{23}z^{8}$

QUIZIZZ

NAME : _____

CLASS : _____

Theoretical vs Experimental Probability
35 Questions

DATE : _____

1. Bella will roll a number cube, labeled 1 through 6, 300 times. ***About*** how many times could Bella expect to roll a number less than 4?

A 100

B 200

C 150

D 50

2. Alexis has a number cube labeled 2, 4, 6, 8, 10, and 12. He will roll the cube 100 times. About how many times could Alexis expect the number cube to land on 8?

A 8

B 11

C 5

D 16

3. Shamar can hit a target with a baseball 12 times out of 18 total throws. Based on that rate, what is the approximate probability he will hit the target on his next throw?

A 67%

B 50%

C 12%

D 18%

4. Achilles rolled a number cube, labeled 1 through 6, 200 times and recorded each of his results. ***About*** how many times could Achilles expect to roll a 3 or 4?

A 70

B 130

C 35

D 100

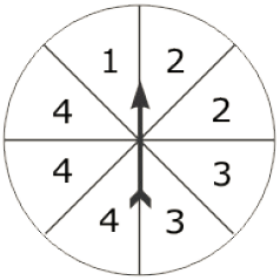
5. McKayla flipped a coin 150 times. How many times could McKayla expect the coin to land on tails?

A 50

B 100

C 25

D 75

6. 

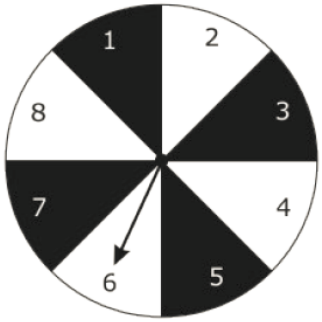
Jayla will spin the spinner below 400 times and record each result. About how many times should Jayla expect the spinner to land on a 3?

A 250

B 200

C 100

D 150

7. 

Diontae spun the spinner below 300 times and recorded each of his results. How many times could Diontae expect to spin a number greater than 6?

A 50

B 25

C 100

D 75

8. A farmer found 10 out of every 25 tomato plants will grow. This year, the farmer planted 200 tomato plants. How many plants can the farmer expect to grow?

A 80

B 100

C 125

D 50

9. The probability of winning a game is 1 : 12. If Jada plays the game 60 times, how many times could she expect to win?

A 8

B 10

C 5

D 12

10. The probability of winning a certain game is 5/8. If the game is played 500 times, about how many times would someone be expected to ***lose***?

A 400

B 200

C 300

D 100

11. The probability of flipping a heads on an unfair coin is 0.40. If the coin is tossed 500 times, approximately how many times will the coin come up tails?

A 300

B 400

C 40

D 200

12. Experimental Probability is:

A What I think Happens

B What should happen

C What Will happen

D What actually happens

13. Theoretical Probability is?

A What I want to Happen

B What does happen

C What Will Happen

D What Should happen

14. What type of probability is a way of estimating the probability of an event happening based on repeated trials?

A Experimental Probabillity

B Theoretical Probability

15. What type of probability is used to find the probability of an event when all outcomes are equally as likely. "What COULD happen"

A Theoretical Probability

B Experimental Probability

16. Isidro flips a fair coin 40 times. How many times can he expect heads to appear?

A 20

B 15

C 10

D 4

17. Theoretical probability is based on _____

A What you have. Without experiments

B your tally. With experiments

18. Experimental probability is based on _____

A What you have. Without experiments

B your tally. With experiments

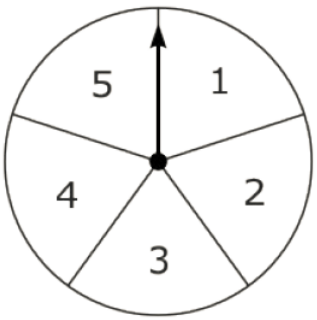
19. The probability of picking a quarter from a jar of coins is 0.125. If Daniel has 250 coins in the jar, about how many quarters are in the jar?

A 40

B 30

C 35

D 25

20. 

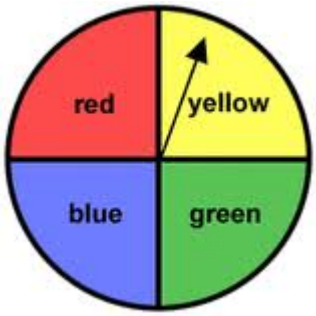
Leonta will spin the spinner 575 times. ***About*** how many times should Leonta expect to land on an odd number?

A 400

B 350

C 200

D 250

21. 

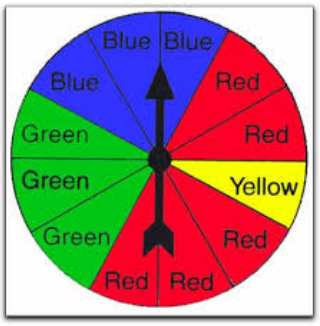
What is the theoretical probability of the spinner landing on yellow?

A 1/2

B 1/4

C 2/3

D 1/3

22. 

The spinner was spun 30 times and landed on blue 12 times.
What was the experimental probability of ***NOT*** landing on Blue

A 2/5

B 3/5

C 1/5

D 4/5

23. A classroom is arranged with 8 seats in the front row, 10 seats in the middle row, and 12 seats in the back row. The teacher randomly assigns seats to students as they enter the classroom.

What is the probability that the first student who enters the classroom will be assigned a seat in the front row?

A 2/5

B 2/3

C 4/11

D 4/15

24. Rachel is setting up tables for a party. Four of the tables are covered with red tablecloths, and eight of the tables are covered with white tablecloths. Guests will be randomly seated at the tables when they arrive. Each table can seat 8 guests.

What is the probability that the first guest to arrive will be seated at a table with a red tablecloth?

A 1/3

B 1/8

C 1/2

D 1/4

25. This spinner has 8 sections of equal size.

The arrow of this spinner was spun 24 times and landed on the letter B four times. What is the experimental probability the arrow will land on the letter B?

A 1/4

B 1/8

C 1/5

D 1/6

26. Experimental Probability is _____

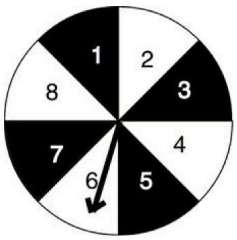
A data from our experiment

B our prediction

27. Theoretical Probability is ____

A data from our experiment

B our prediction

28. 

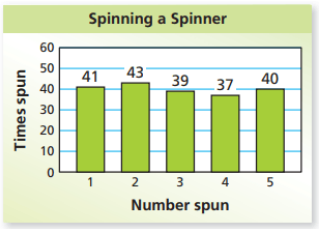
What is the theoretical probability of the spinner landing on a 5?

A $\frac{5}{8}$

B $\frac{1}{8}$

C $\frac{1}{2}$

D $\frac{1}{5}$

29. 

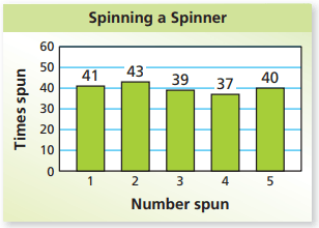
The bar graph shows the results of spinning the spinner 200 times. What is the experimental probability of landing on a 3?

A $\frac{3}{50}$

B $\frac{3}{200}$

C $\frac{39}{200}$

D $\frac{39}{50}$

30. 

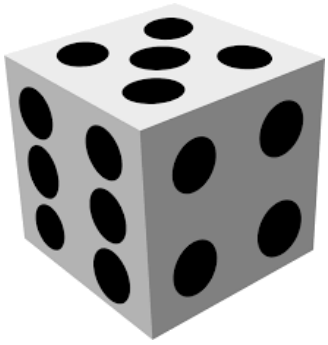
The bar graph shows the results of spinning the spinner 200 times. What is the theoretical probability of landing on a 4 ?

A $\frac{4}{5}$

B $\frac{37}{200}$

C $\frac{1}{5}$

D $\frac{37}{50}$

31. 

What is the theoretical probability of tossing a number cube and it landing on an even number? *reduce your fraction*

A $\frac{2}{3}$

B $\frac{1}{2}$

C $\frac{1}{3}$

32.

Number	Times tossed
1	13
2	15
3	14
4	12
5	18
6	18

Neil tossed a 6-sided die 90 times. The results of his tosses are recorded in the table below: Which number has the experimental probability of 13/90?

A 1

B 3

C 5

D 4

E 2

33. 

Find the theoretical probability of NOT landing on yellow if you spin the spinner.

A 1/8

B 7/8

C 1

D 7

34. 

A bag contains 5 quarters, 2 dimes, and 4 pennies. What is the probability of picking a quarter?

A 5/6

B 1/3

C 5/11

D 5

35.

Type	Frequency
Green	15
Red	11
Blue	18

Shannon has a bag of jelly beans. She removed one jelly bean, recording the color, and then replaced it. She repeated the process 44 times and record her results in the table. What is the experimental probability of her selecting a red jelly bean?

A $\frac{1}{3}$

B $\frac{18}{26}$

C $\frac{11}{33}$

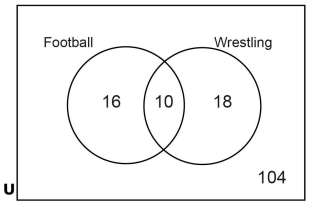
D $\frac{11}{44}$

NAME : _____

CLASS : _____

DATE : _____

Venn Diagram
15 Questions

1. 

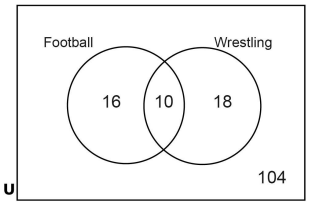
How many senior boys play football but do not wrestle?

A 8

B 26

C 104

D 16

2. 

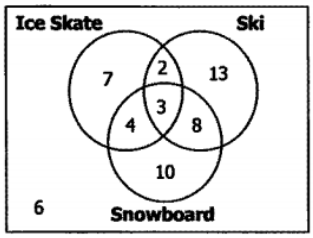
How many senior boys play football or wrestle?

A 28

B 104

C 44

D 26

3. 

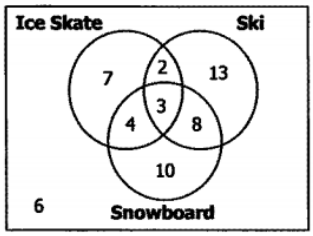
How many students took the survey?

A 30

B 6

C 47

D 53

4. 

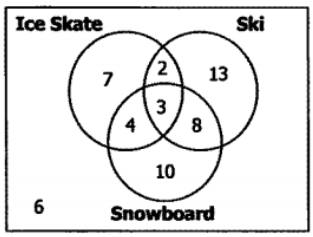
How many students do not snowboard?

A 21

B 22

C 28

D 29

5. 

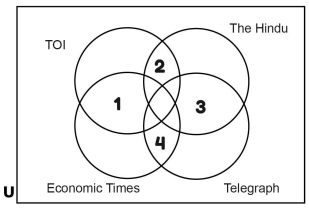
How many students do not ski or ice skate?

A 22

B 28

C 16

D 10

6. 

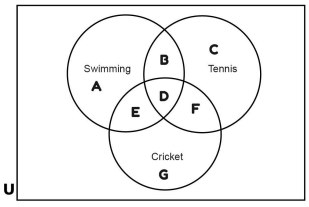
Identify each region of the Venn diagram that represents students who reads only the TOI and The Hindu.

A 1

B 3

C 2

D 4

7. 

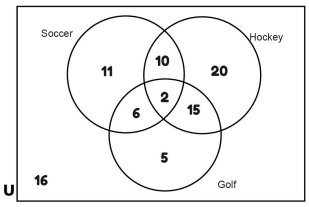
Which region(s) represent students that enjoy swimming and tennis?

A B and D

B A and C

C B

D D

8. 

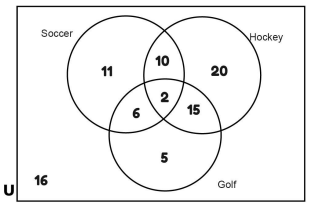
How many students like Soccer or Hockey or Golf?

A 33

B 36

C 2

D 69

9. 

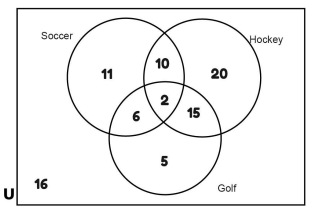
How many students like Soccer or Golf ?

A 41

B 49

C 8

D 16

10. 

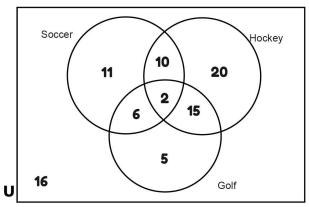
How many students do not like either Soccer or Hockey ?

A 21

B 16

C 5

D 28

11. 

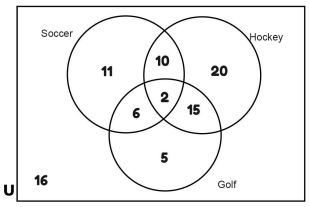
How many students like both Soccer and Hockey but not Golf ?

A 10

B 41

C 12

D 43

12. 

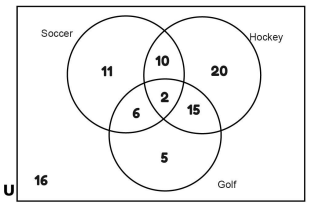
How many students only like Soccer ?

A 18

B 45

C 29

D 11

13. 

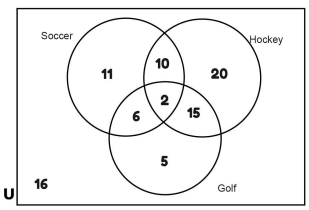
How many students like both Hockey and Golf ?

A 40

B 56

C 17

D 58

14. 

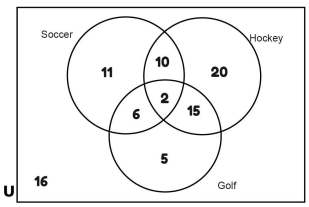
How many students do not like either Soccer or Golf ?

A 47

B 36

C 63

D 20

15. 

How many students do not like either Soccer or Golf or Hockey?

A 16

B 36

C 2

D 33