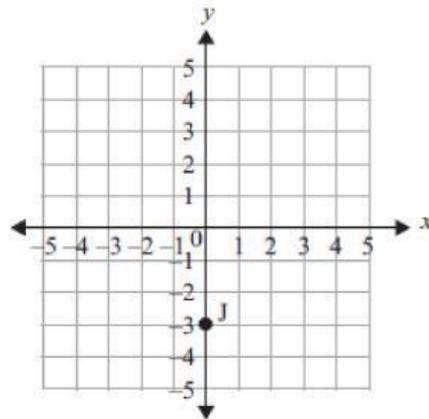


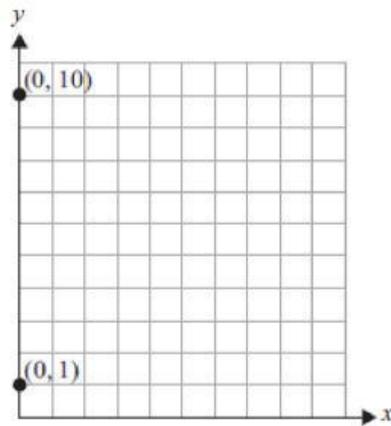
1. Use the coordinate grid below to answer the question.



What are the coordinates of point J?

- A. (0, 3)
 - B. (-3, 0)
 - C. (3, 0)
 - D. (0, -3)
2. John eats $\frac{3}{5}$ of a candy bar. What percent of the candy bar does he eat?
- A. 6%
 - B. 30%
 - C. 35%
 - D. 60%
3. A small submarine started its dive at sea level and descended 30 feet per minute. Which integer represents the submarine's depth after seven minutes?
- A. -210 feet
 - B. -23 feet
 - C. 37 feet
 - D. 210 feet

4. Use the coordinate grid below to answer the question.



What is the distance between the points at $(0, 1)$ and $(0, 10)$?

- A. 8 units
 - B. 9 units
 - C. 10 units
 - D. 11 units
5. Use the table below to answer the question.

Calorie Table

Food	Calories
Cheddar cheese, 1 ounce	114
Orange, 1 medium	70
Egg, 1 large	75
Strawberries, 1 serving	45
Pecans, 1/4 cup	185

Which expression represents the number of calories in r oranges and $\frac{1}{4}$ cup of pecans?

- A. $70 + 185$
- B. $75r + 185$
- C. $70r + 185$
- D. $75 + 185$

6. Which represents the value of s in $s + 12 \geq 100$?

- A. $s > 88$
- B. $s < 88$
- C. $s \geq 88$
- D. $s \leq 88$

7. What is 6.43×10^7 in standard notation?

- A. 643×10^5
- B. 64,300,000
- C. 6,430,000,000
- D. 64.3×10^{10}

8. Pat has his own lawn mowing service. The maximum Pat charges to mow a lawn is \$20. Which inequality represents the amount Pat could charge, c , to mow a lawn?

- A. $c > 20$
- B. $c \geq 20$
- C. $c = 20$
- D. $c \leq 20$

9. The attendance at three concerts was 876, 647, and 856. Which expression shows how to estimate the total attendance at the concerts?

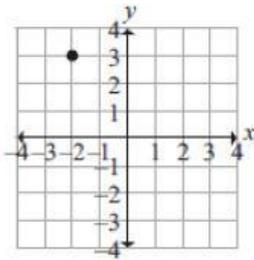
- A. $800 + 600 + 800$
- B. $900 + 700 + 900$
- C. $900 + 600 + 900$
- D. $1,000 + 700 + 900$

11. What is 35% of 80?

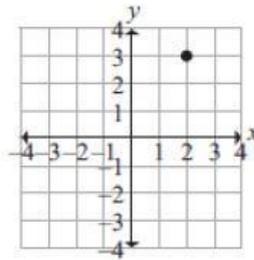
- A. 28
- B. 45
- C. 115
- D. 2,800

10. Which graph shows the ordered pair $(-2, 3)$ plotted correctly?

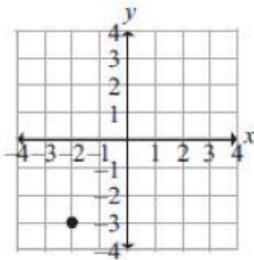
A.



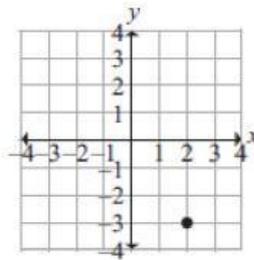
B.



C.



D.



12. Use the set of numbers below to answer the question.

35	20	30	25	20
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What is the median of the list of numbers?

- A. 30
- B. 20
- C. 25
- D. 26

13. Which rational number is the greatest?

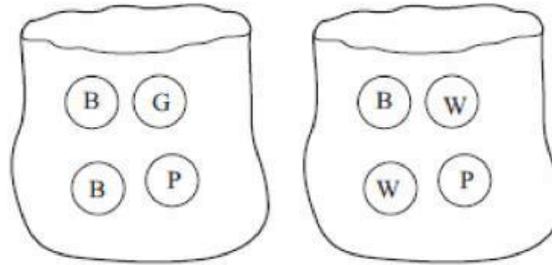
- A. 0.55
- B. 0.6
- C. $\frac{9}{20}$
- D. $\frac{1}{2}$

14. Mikel walks down 5 flights of stairs. Each flight has 8 steps. Which describes Mikel's descent?

- A. $-5 + 8 = 3$
- B. $(-5) + (-8) = -13$
- C. $(-5)(-8) = 40$
- D. $(-5)(8) = -40$

15. Use the picture below to answer the question.

Bags of Marbles



Bag A

Bag B

B = blue marble
G = green marble

W = white marble
P = purple marble

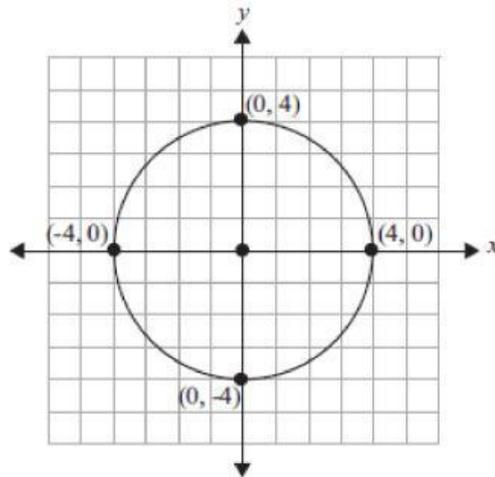
One marble is drawn at random from each bag. What is the probability that neither marble is blue?

- A. $\frac{1}{16}$
- B. $\frac{3}{8}$
- C. $\frac{1}{2}$
- D. $\frac{3}{4}$

16. Middle-school students sold cookies in packages of 12. On the first day, they sold x packages. On the second day, they sold twice as many packages as on the first day. Which expression shows the number of cookies they sold on the second day?

- A. $12(2x)$
- B. $12(x + 2)$
- C. $12(x - 2)$
- D. $\frac{12x}{2}$

17. Use the coordinate grid below to answer the question.



What is the circumference of the circle?

- A. 12.56 units
- B. 25.12 units
- C. 50.24 units
- D. 251.2 units

18. Use the chart below to answer the question.

Spinner Experiment

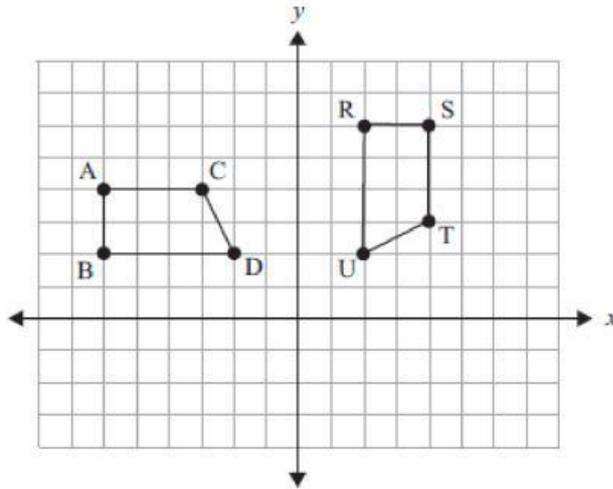
Color	Tally	Frequency
red		27
green		20
blue		28
orange		25

Students are given a colored spinner divided equally between red, green, blue, and orange sections. Students spin the spinner 100 times and collect the data in a chart. Which statement reflects the relationship between the experimental and theoretical probability of the spinner landing on green?

- A. There is not enough information to calculate experimental probability.
- B. The experimental probability is greater than theoretical probability.
- C. The experimental probability and theoretical probability are equal.
- D. The theoretical probability is greater than the experimental probability.

19. Carmen has saved \$24 to buy a DVD player that costs \$96. She plans on saving \$12 each week. The equation $12w + 24 = 96$ can be used to find the number of weeks, w , when she will have enough money to buy the DVD player. How many weeks before Carmen has enough for the DVD player?
- A. 6 weeks
 - B. 8 weeks
 - C. 10 weeks
 - D. 12 weeks

20. Use the coordinate grid below to answer the question.



What transformation of trapezoid ACDB will create trapezoid STUR?

- A. dilation
 - B. rotation
 - C. reflection
 - D. translation
22. The temperature is 8°F . As a cold front moves in, the temperature drops 6°F per hour. What is the temperature at the end of 3 hours?
- A. -26°F
 - B. -10°F
 - C. 5°F
 - D. 26°F

21. Use the table below to answer the question.

Median House Prices (1970 - 2000)

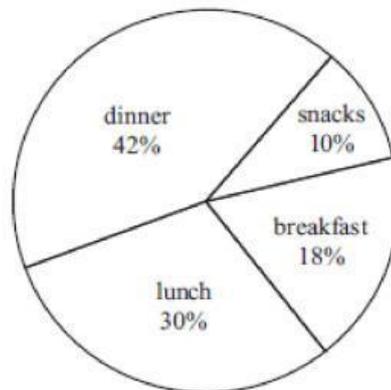
Year	Median House Price
1970	\$23,400
1975	\$39,300
1980	\$64,600
1985	\$84,300
1990	\$122,900
1995	\$133,900
2000	\$169,000

Which describes the trend of the data in the table?

- A. always decreasing
- B. decreasing followed by increasing
- C. always increasing
- D. increasing followed by decreasing

23. Use the graph below to answer the question.

Money Spent on Food



A shopper spent \$100 at the store. How many dollars did the shopper spend on snacks?

- A. \$10
- B. \$18
- C. \$30
- D. \$42

24. What is the value of the expression $8x - 10$ when $x = 5$?
- A. 3
 - B. 4
 - C. 30
 - D. 50

Reference Sheet

Shape	Area	Circumference	Key	
Circle	$A = \pi r^2$	$C = \pi d = 2\pi r$	b = base	w = width
Triangle	$A = \frac{1}{2}bh$	Perimeter	B = area of base	d = diameter
Rectangle	$A = lw$	$P = 2l + 2w$	h = height	r = radius
Trapezoid	$A = \frac{1}{2}h(b_1 + b_2)$		l = length	
Parallelogram	$A = bh$		Use 3.14 for π	
Square	$A = s^2$			

3 – Dimensional Shape	Volume	Percent Change
Rectangular Prism	$V = lwh = Bh$	$\% \text{ change} = \frac{\text{difference in amount}}{\text{original amount}}$

Standard Units	Metric Units
Conversions – Length	
1 yard (yd) = 3 feet (ft) = 36 inches (in.)	1 meter (m) = 100 centimeters (cm)
1 mile (mi) = 1,760 yards (yd) = 5,280 feet (ft)	1 meter (m) = 1,000 millimeters (mm)
	1 kilometer (km) = 1,000 meters (m)
Conversions – Volume	
1 cup = 8 fluid ounces (fl oz)	1 liter (l) = 1,000 milliliters (ml)
1 pint (pt) = 2 cups	1 liter (l) = 1,000 cubic centimeters (cu. cm)
1 quart (qt) = 2 pints (pt)	
1 gallon (gal.) = 4 quarts (qt)	
Conversions – Weight/Mass	
1 pound (lb) = 16 ounces (oz)	1 gram (g) = 1,000 milligrams (mg)
1 ton = 2,000 pounds (lb)	1 kilogram (kg) = 1,000 grams (g)