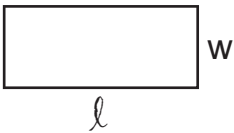

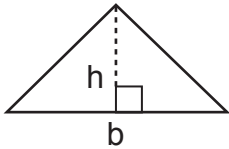
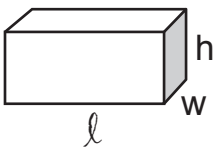
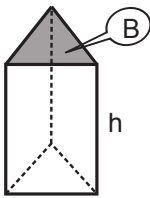
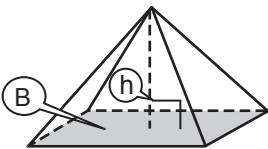
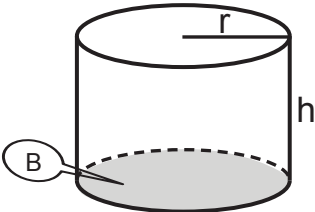
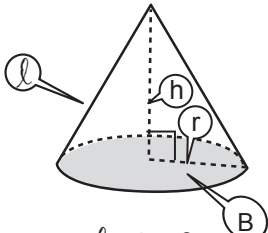
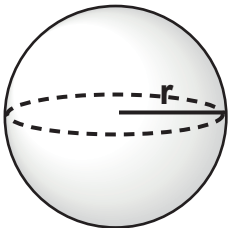
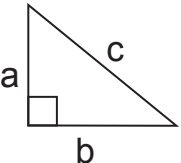
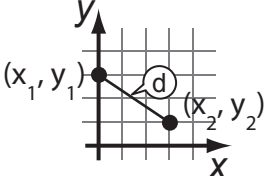
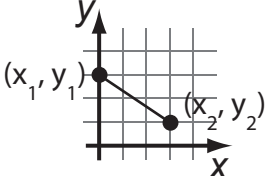
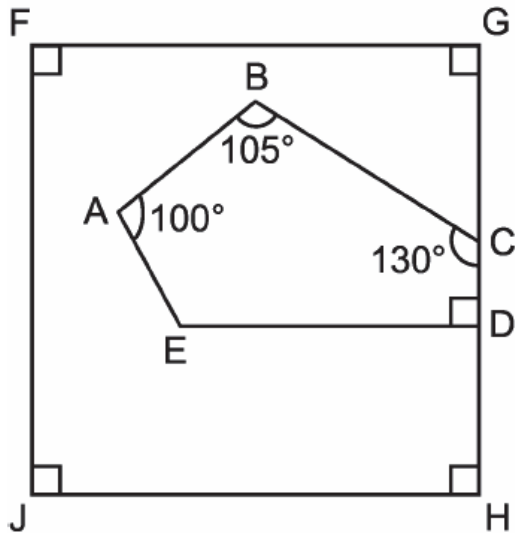


<p style="writing-mode: vertical-rl; transform: rotate(180deg);">MEASUREMENTS</p>	<p>1 meter = 100 centimeters 1 gram = 1000 milligrams 1 liter = 1000 cubic centimeters 1 kilometer = 1000 meters 1 kilogram = 1000 grams</p> <p>1 yard = 3 feet 1 pound = 16 ounces 1 cup = 8 fluid ounces 1 mile = 5280 feet 1 ton = 2000 pounds 1 pint = 2 cups 1 hour = 60 minutes 1 quart = 2 pints 1 minute = 60 seconds 1 gallon = 4 quarts</p>		
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">AREA (A)</p>	 <p>$A = lw$</p>	 <p>$A = bh$</p>	 <p>$A = \frac{1}{2} bh$</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">SURFACE AREA (SA) and VOLUME (V)</p>	 <p>$SA = 2(lw + wh + lh)$ $V = lwh = Bh$ B = Area of Base</p>	 <p>$SA = \text{Sum of Areas of all faces}$ $V = Bh$ B = Area of Base</p>	 <p>$SA = \text{Sum of Areas of all faces}$ $V = \frac{1}{3} Bh$ B = Area of Base</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">SURFACE AREA (SA) and VOLUME (V)</p>	 <p>$SA = 2\pi rh + 2\pi r^2$ $V = \pi r^2 h = Bh$ B = Area of Base</p>	 <p>$SA = (\pi r l) + (\pi r^2)$ $V = (\frac{1}{3} \pi r^2)(h) = \frac{1}{3} Bh$ B = Area of Base</p>	 <p>$SA = 4\pi r^2$ $V = \frac{4}{3}\pi r^3$</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">SURFACE AREA (SA) and VOLUME (V)</p>	 <p>$a^2 + b^2 = c^2$</p>	 <p>$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$</p>	 <p>Slope: $m = \frac{y_2 - y_1}{x_2 - x_1}$</p>

2010-2013 Mathematics Sample Test – Grade 8

1. What is the measure of angle E?



- A. 25°
- B. 115°
- C. 205°
- D. 425°

2. Which of the cities listed had the highest low temperature on Sunday?

Cities	Saturday		Sunday	
	High	Low	High	Low
Abilene	61°	36°	70°	48°
Akron	49°	23°	46°	29°
Albany	42°	28°	45°	33°
Albuquerque	63°	34°	67°	41°
Amarillo	60°	27°	64°	39°
Anchorage	37°	25°	36°	27°
Asheville	64°	32°	55°	34°
Aspen	59°	26°	46°	17°
Atlanta	74°	48°	64°	39°
Atlantic City	53°	27°	49°	38°

- A. Aspen
- B. Atlanta
- C. Amarillo
- D. Abilene

2010-2013 Mathematics Sample Test – Grade 8

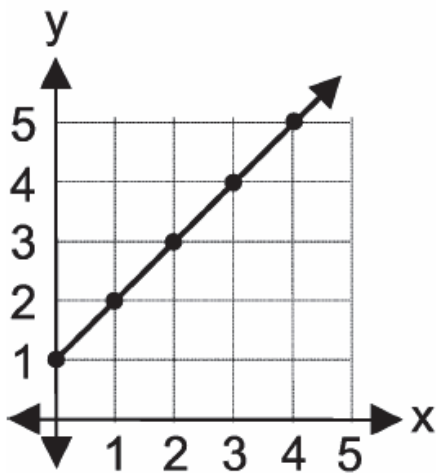
3. Hal wants to ride his bike 200 miles this month. So far, he has ridden 65 miles. There are 15 days left.

On average, how many miles does Hal need to ride each day?

- A. 14
B. 9
C. 8
D. 4
4. Malik was given a bag of blue, green, red, and white marbles for an experiment. Without looking, he randomly pulled out a marble, wrote down its color and replaced it. After ten tries he had these results: six blue, three red, and one white.

Using this information, which color marble is most likely to be pulled out next?

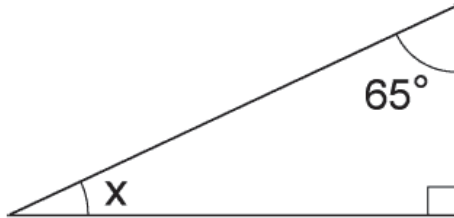
- A. Blue
B. Green
C. Red
D. White
5. Which equation best describes the relationship shown in the graph?



- A. $y = x + 1$
B. $y = x - 1$
C. $y = 2x$
D. $y = \frac{x}{2}$

2010-2013 Mathematics Sample Test – Grade 8

6. Alex is building a sandbox for his son, who wants it to be in the shape of a triangle. What should the third angle (x) measure?



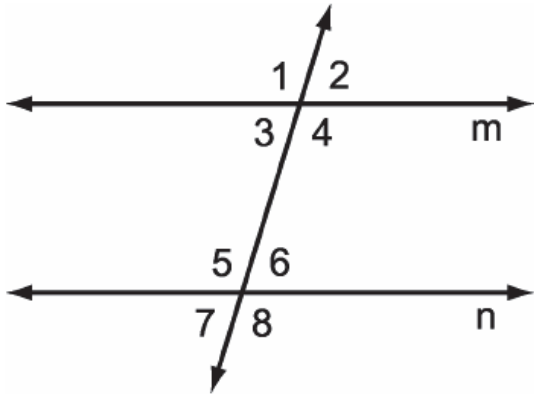
- A. $x = 25^\circ$
B. $x = 30^\circ$
C. $x = 65^\circ$
D. $x = 155^\circ$
7. Our team played five basketball games against a rival school. Which is closest to our team's average score?

	Our School	Rival School
Monday	57	71
Tuesday	62	55
Wednesday	81	80
Thursday	51	66
Friday	66	45

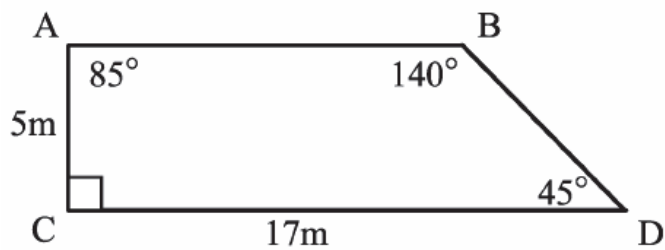
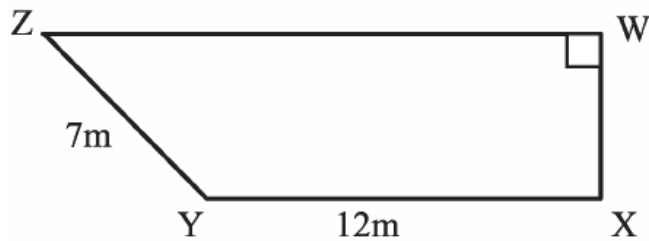
- A. 371
B. 81
C. 63
D. 60
8. Sal pays \$30 to join the Golf Club. Each time he golfs, it costs \$8. What is the TOTAL cost for Sal to golf 20 times at his Golf Club?
- A. \$240
B. \$220
C. \$190
D. \$160

2010-2013 Mathematics Sample Test – Grade 8

9. In the figure below, lines m and n are parallel. If $m \angle 1 = 100^\circ$, then find $m \angle 5$.



- A. 80°
 - B. 100°
 - C. 110°
 - D. 140°
10. Using the congruent quadrilaterals, what is the measure of $\angle XYZ$?



- A. 85°
- B. 130°
- C. 140°
- D. 220°

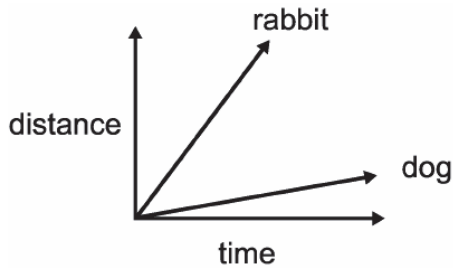
2010-2013 Mathematics Sample Test – Grade 8

11. What is the median of the following numbers?

5, 8, 4, 6, 4, 3, 2, 8

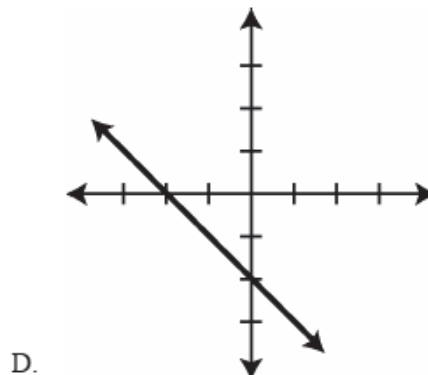
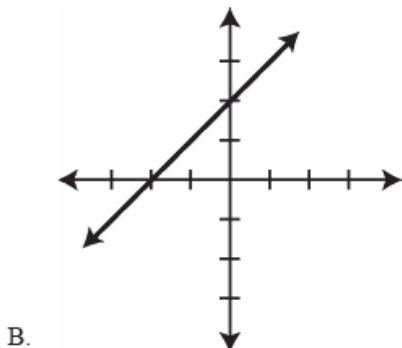
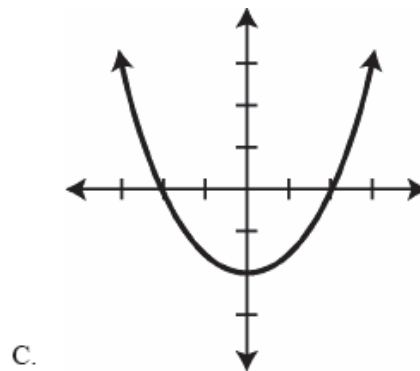
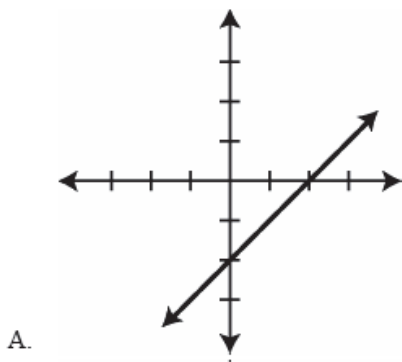
- A. 4
- B. 4.5
- C. 5
- D. 6.5

12. Based on the graph, which of the following must be true.



- A. The rabbit and the dog are running in opposite directions.
- B. The dog is running faster than the rabbit.
- C. The rabbit is running faster than the dog.
- D. At the current rate, the dog will catch the rabbit.

13. Which graph represents the equation $y = x - 2$?

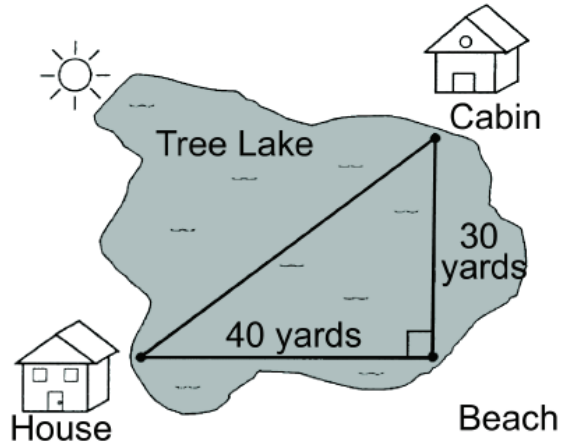


2010-2013 Mathematics Sample Test – Grade 8

14. Four friends were shooting free throws with a basketball.
The results are in the table. If Cindy and Jenny each take one more free throw, who has the highest probability of making her shot?

	Made	Total shots
Steven	1	3
Cindy	2	6
Jenny	3	9
José	4	12

- A. They both have the same chance.
B. Cindy
C. Jenny
D. There is not enough information.
15. Mrs. Kovack likes to swim in Tree Lake for exercise. She swims from the cabin to the beach, over to the house, then back to the cabin.
If she does this four times, how many yards will she swim?



- A. 280 yards
B. 480 yards
C. 560 yards
D. 1,200 yards

2010-2013 Mathematics Sample Test – Grade 8

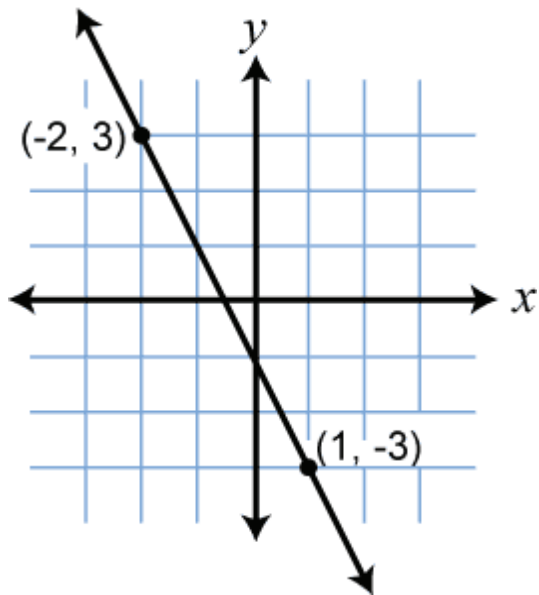
16. Cathy's test scores are:

75, 81, 85, 85, 85, 90, 95, 100

If her teacher decides to drop the lowest score, which of these would be affected the most?

- A. Mean
- B. Median
- C. Mode
- D. Range

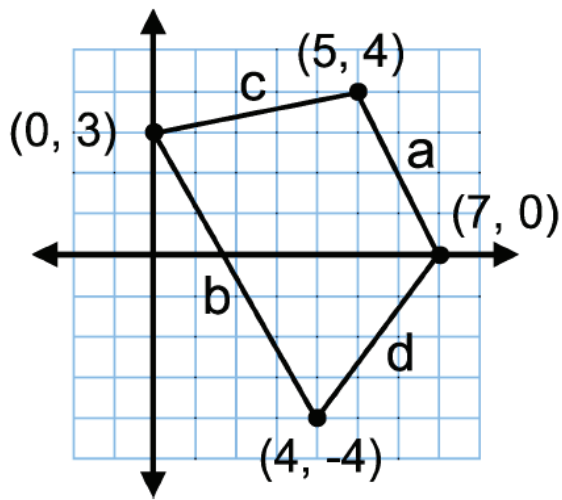
17. Find the slope of this line.



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

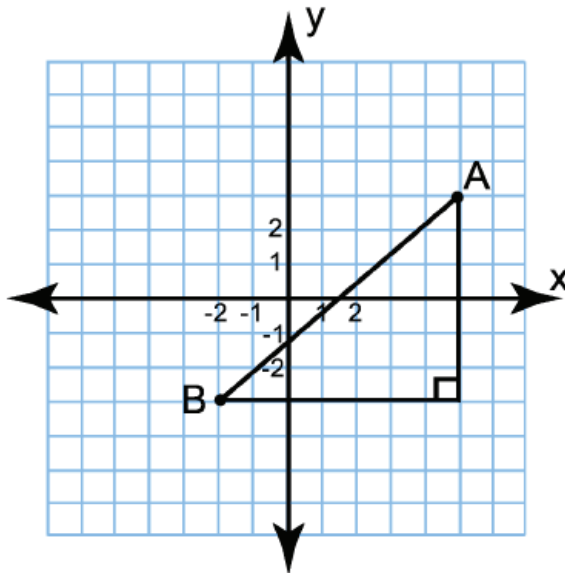
2010-2013 Mathematics Sample Test – Grade 8

18. Which name best describes the figure?



- A. Parallelogram
- B. Quadrilateral
- C. Rhombus
- D. Trapezoid

19. To the nearest whole number, what is the distance between points A and B?



- A. 7
- B. 8
- C. 9
- D. 10

2010-2013 Mathematics Sample Test – Grade 8

20. What is the equation of the straight line through these 3 points?
(2,2), (4,5), (6,8)

A. $y = \frac{3}{2}x - 1$

B. $y = \frac{2}{3}x + \frac{2}{3}$

C. $y = \frac{3}{2}x - 3$

D. $y = \frac{2}{3}x - 1$

Oregon Mathematics Sample Test

Use number 2 pencil.
Do NOT use ink or ball point pen.
Make heavy dark marks that completely fill the circle.
Erase completely any marks you wish to change.

Name of Student

Name of Teacher

Name of School

- | | | | | | | | | | |
|----|-----|-----|-----|-----|----|-----|-----|-----|-----|
| 1 | (A) | (B) | (C) | (D) | 11 | (A) | (B) | (C) | (D) |
| 2 | (A) | (B) | (C) | (D) | 12 | (A) | (B) | (C) | (D) |
| 3 | (A) | (B) | (C) | (D) | 13 | (A) | (B) | (C) | (D) |
| 4 | (A) | (B) | (C) | (D) | 14 | (A) | (B) | (C) | (D) |
| 5 | (A) | (B) | (C) | (D) | 15 | (A) | (B) | (C) | (D) |
| 6 | (A) | (B) | (C) | (D) | 16 | (A) | (B) | (C) | (D) |
| 7 | (A) | (B) | (C) | (D) | 17 | (A) | (B) | (C) | (D) |
| 8 | (A) | (B) | (C) | (D) | 18 | (A) | (B) | (C) | (D) |
| 9 | (A) | (B) | (C) | (D) | 19 | (A) | (B) | (C) | (D) |
| 10 | (A) | (B) | (C) | (D) | 20 | (A) | (B) | (C) | (D) |