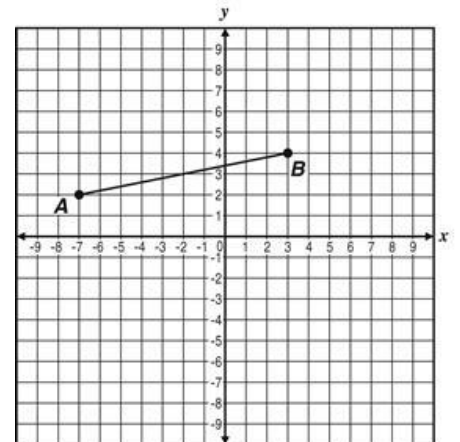


- A circle has a diameter that extends from $(-5, 7)$ to $(6, -3)$. What are the coordinates of the center of the circle?
 - A. $(-\frac{11}{2}, 5)$
 - B. $(-4, \frac{13}{2})$
 - C. $(\frac{1}{2}, 2)$
 - D. $(1, 4)$

- The center of a circle is at $Q(0, 6)$. A radius is drawn from Q to $P(4, 6)$. What are the coordinates of the endpoint of the diameter that includes segment PQ ?
 - A. $(0, 2)$
 - B. $(0, 10)$
 - C. $(-4, 6)$
 - D. $(6, -4)$

- A parallelogram has vertices $(5, 0)$, $(3, -3)$, $(-4, -3)$, and $(-2, 0)$. The diagonals of the parallelogram intersect at their midpoints. What are the coordinates of the intersection of the diagonals?
 - A. $(-0.5, -3)$
 - B. $(0.5, -1.5)$
 - C. $(1.5, 0)$
 - D. $(4, -1.5)$

- On the grid below, \overline{AB} represents Canal Street. Point A represents the location of Doug's Market and Point B represents the location of Hamel's BBQ.



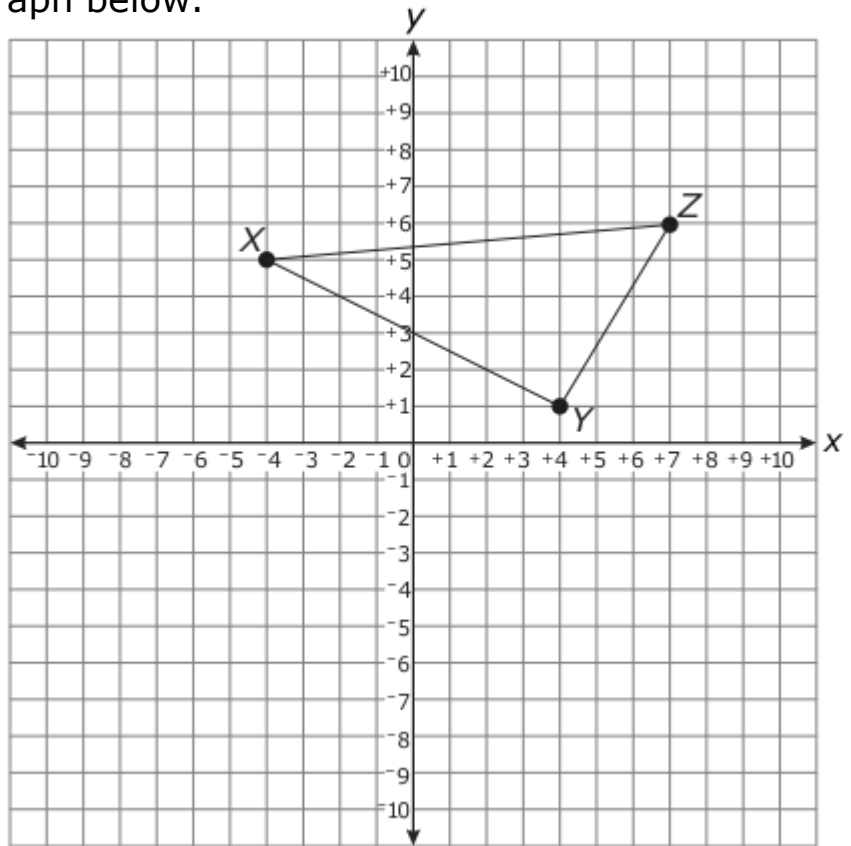
If Delicious Donuts is located on Canal Street midway between Doug's Market and Hamel's BBQ, which coordinate pair best represents the location of Delicious Donuts?

- A. $(-2, 3)$
- B. $(2, -3)$
- C. $(2, 3)$
- D. $(5, 3)$

5. A rectangle drawn on the coordinate plane has vertices at $(4, 4)$, $(1, 8)$, $(-7, 2)$, and $(-4, -2)$.
What is the area, in square units, of the rectangle?
- A. 24
B. 30
C. 44
D. 50
6. What is the area of the triangle whose vertices are located at $(-3, 3)$, $(5, 1)$, and $(-3, -4)$?
- A. 14 square units
B. 25 square units
C. 28 square units
D. 56 square units
7. The coordinates of the vertices of a square are $(2, 10)$, $(8, 4)$, $(2, -2)$, and $(-4, 4)$. What is the area of the square?
- A. 8.5 units^2
B. 33.9 units^2
C. 36 units^2
D. 72 units^2
8. What is the **approximate** perimeter of a triangle with vertices at $(3, 1)$, $(4, 5)$, and $(6, 4)$?
- A. 6.3 units
B. 10.6 units
C. 18.0 units
D. 40.0 units
9. What is the area of a triangle with vertices at $(1, 4)$, $(5, 1)$, and $(8, 5)$?
- A. 12.5 units^2
B. 17.5 units^2
C. 25 units^2
D. 35 units^2
10. The vertices of a triangle are $(4, 3)$, $(8, 4)$, and $(4, 10)$. What is the **approximate** perimeter of the triangle?
- A. 14 units
B. 18 units
C. 22 units
D. 33 units

11. Triangle XYZ is shown on the graph below.

What is the **approximate** area of triangle XYZ ?



- A. 20 units²
- B. 26 units²
- C. 40 units²
- D. 52 units²

12. A triangle has vertices at $(1, 3)$, $(2, -3)$, and $(-1, -1)$. What is the **approximate** perimeter of the triangle?

- A. 10
- B. 14
- C. 15
- D. 16

13. A figure has vertices at $(2, 5)$, $(4, 3)$, $(5, 4)$, and $(3, 6)$. Which most precisely describes the figure?

- A. parallelogram
- B. rectangle
- C. rhombus
- D. square

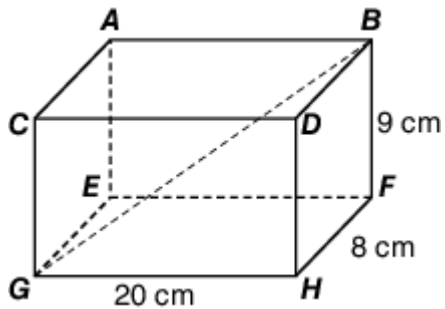
14. Right triangle JKL has vertices located at $J(4, 3)$ and $K(2, -2)$. Which could be the coordinates of point L ?

- A. $(0, 3)$
- B. $(0, 0)$
- C. $(-1, 0)$
- D. $(-3, 0)$

15. Which term **best** describes the shape that has vertices at $(0, 0)$, $(2, 3)$, $(-2, 4)$, and $(-4, 1)$?
- A. parallelogram
B. rhombus
C. rectangle
D. square
16. Three vertices of a rectangle are located at $(-5, 3)$, $(1, -1)$, and $(-1, -4)$. What are the coordinates of the fourth vertex of the rectangle?
- A. $(-7, 0)$
B. $(-6, 0)$
C. $(-6, -1)$
D. $(-5, 1)$
17. Which **best** describes the quadrilateral with vertices $(-2, -2)$, $(-3, 4)$, $(3, 0)$, and $(2, 6)$?
- A. parallelogram
B. rectangle
C. rhombus
D. square
18. Triangle PQR has vertices located at $(2, 2)$, $(5, -4)$, and $(-4, -1)$. What type of triangle is triangle PQR ?
- A. equilateral
B. isosceles
C. obtuse
D. scalene
19. A triangle has the vertices $(-5, -1)$, $(-2, -3)$, and $(-5, -4)$. Which term describes the triangle?
- A. equilateral triangle
B. scalene triangle
C. right triangle
D. isosceles triangle

20.

What is the approximate length of \overline{BG} in the right rectangular prism below?



A. 16.0 cm

C. 23.3 cm

B. 21.5 cm

D. 26.2 cm

21. The coordinates of the midpoint of a line segment are $(9, -13)$. The coordinates of an endpoint of the segment are $(-4, 5)$. What are the coordinates of the other endpoint?

A. $(-2, \frac{1}{2})$

C. $(14, -21)$

B. $(\frac{5}{2}, -4)$

D. $(22, -31)$

Geometry Study Guide [1592420]SUBJECT: **Mathematics**ADMINISTRATION DATES: **Not Scheduled**PREFERRED STANDARDS DOCUMENT: ***Mathematics**GRADE LEVEL: **08 - Eighth Grade - 10 - Tenth Grade**NUMBER OF QUESTIONS: **21**

Item #	Correct Answer	Standard ID	Point Value	Type
1	C	CCSS.Math.Content.HSG-GPE.B.6	1	Multiple Choice
2	C	CCSS.Math.Content.HSG-GPE.B.6	1	Multiple Choice
3	B	CCSS.Math.Content.HSG-GPE.B.6	1	Multiple Choice
4	A	CCSS.Math.Practice.MP1	1	Multiple Choice
5	D	CCSS.Math.Practice.MP1	1	Multiple Choice
6	C	CCSS.Math.Content.HSG-GPE.B.7	1	Multiple Choice
7	D	CCSS.Math.Content.HSG-GPE.B.7	1	Multiple Choice
8	B	CCSS.Math.Content.HSG-GPE.B.7	1	Multiple Choice
9	A	CCSS.Math.Content.HSG-GPE.B.7	1	Multiple Choice
10	B	CCSS.Math.Content.HSG-GPE.B.7	1	Multiple Choice
11	B	CCSS.Math.Content.HSG-GPE.B.7	1	Multiple Choice
12	B	CCSS.Math.Content.HSG-GPE.B.7	1	Multiple Choice
13	B	CCSS.Math.Content.HSG-GPE.B.4	1	Multiple Choice
14	D	CCSS.Math.Content.HSG-GPE.B.4	1	Multiple Choice
15	A	CCSS.Math.Content.HSG-GPE.B.4	1	Multiple Choice
16	A	CCSS.Math.Content.HSG-GPE.B.4	1	Multiple Choice
17	A	CCSS.Math.Content.HSG-GPE.B.4	1	Multiple Choice
18	B	CCSS.Math.Content.HSG-GPE.B.4	1	Multiple Choice
19	B	CCSS.Math.Content.HSG-GPE.B.4	1	Multiple Choice
20	C	CCSS.Math.Practice.MP1	1	Multiple Choice
21	D	CCSS.Math.Content.HSG-GPE.B.6	1	Multiple Choice