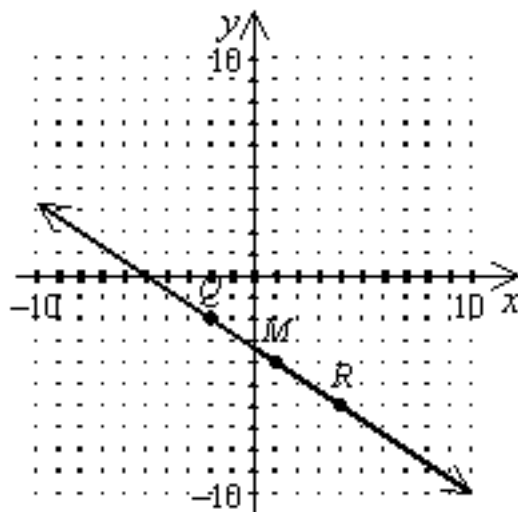
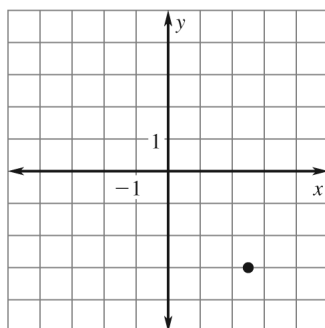


Name: _____ Teacher: _____ Date: _____
 Period: _____ Score Needed on Final: _____

1. The midpoint of \overline{QR} is $M(1, -4)$. One endpoint is $R(4, -6)$. Find the coordinates of the other endpoint.



- ____ 2. Which ordered pair is shown on the coordinate plane?

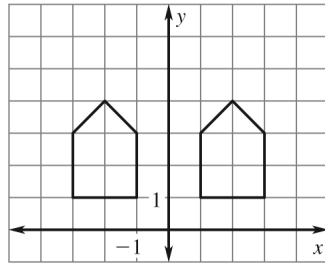


- A. $(-\frac{5}{2}, -3)$
 B. $(\frac{5}{2}, 3)$

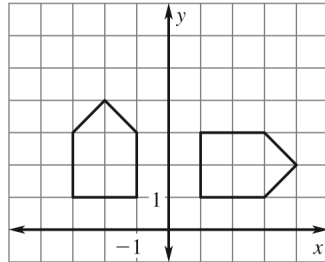
- C. $(\frac{5}{2}, -3)$
 D. $(-\frac{5}{2}, 3)$

- ____ 3. Mrs. Crampton is creating a scrapbook for her daughter. She wants the placement of the photo on the left hand page to be reflected on the right hand page. Which graph shows Mrs. Crampton reflecting the photo?

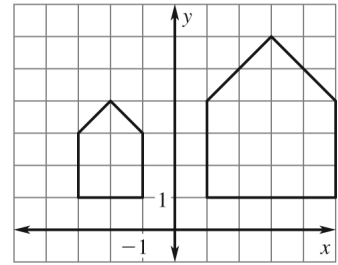
A. Graph 2:



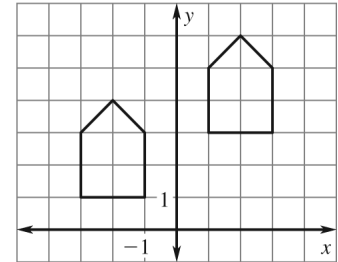
B. Graph 1:



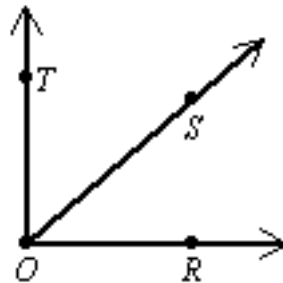
C. Graph 4:



D. Graph 3:



- ____ 4. If angle TOS is acute and angle TOR is right, then angle ROS is what kind of angle?



- A. right
B. straight

- C. acute
D. obtuse

- ____ 5. Which table represents a function?

A. Table 3:

x	y
-5	3
0	5
0	9
1	5

B. Table 1:

x	y
-6	3
-5	4
2	6
2	9

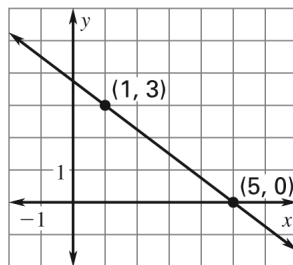
C. Table 2:

x	y
-5	4
-2	3
0	3
1	0

D. Table 4:

x	y
-7	2
-7	-3
4	-5
7	1

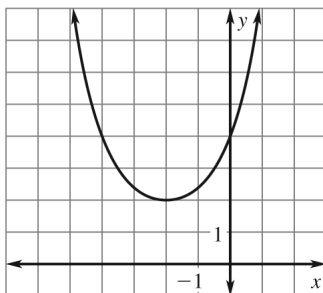
6. Nathan was practicing graphing ordered pairs on a coordinate grid. He graphed the two ordered pairs on the coordinate grid as shown and connected them to form a line. What is the equation of the line that is graphed?



A. $y = \frac{3}{4}x + \frac{15}{4}$
 B. $y = -\frac{3}{4}x + \frac{15}{4}$

C. $y = -\frac{4}{3}x - \frac{4}{5}$
 D. $y = -\frac{4}{3}x + 5$

7. Shawn graphed a quadratic function as shown. By examining the graph, what can be determined about the roots of the related quadratic equation?



- A. There are no real roots.
 B. There are two real roots

- C. Not here
 D. There is one real root.

8. Simplify the expression $7(3b + 2m - 6s) - 3(5s - 2m)$.

A. $21b + 20m - 57s$
 B. $21b + 14m + 57s$

C. $21b + 8m - 27s$
 D. $-21b + 20m + 27s$

9. Find the midpoint of the segment with endpoints (5, 8) and (3, 2).

A. (4, 5)

C. $(\frac{13}{2}, \frac{5}{2})$

B. (-3, 1)

D. (1, 3)

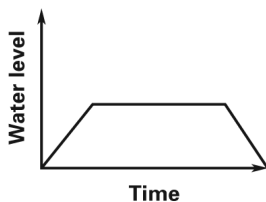
10. The formula for the circumference of a circle is $c = 2\pi r$. In this equation, what is the independent variable?

A. π
 B. C

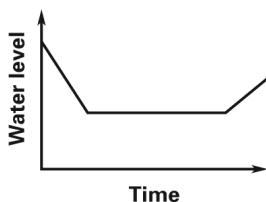
C. 2
 D. r

11. Tyler is running water in the bathtub to take his bath. He runs the water in the tub, then waits five minutes, then gets in. Which graph represents Tyler running the water, getting in the tub, then letting the water out?

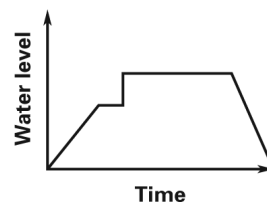
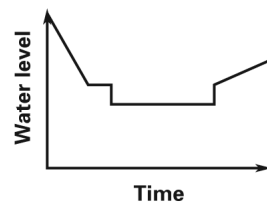
A. Graph 3:



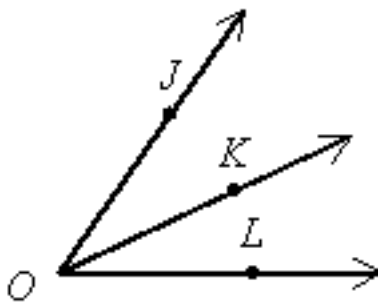
B. Graph 2:



D. Graph 4:



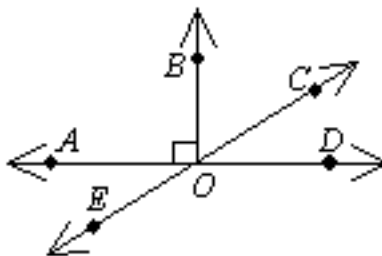
____ 12. If $m\angle KOL = 25^\circ$ and $m\angle JOL = 55^\circ$, then what is the measure of $\angle JOK$?



- A. 35°
- B. 28°

- C. 30°
- D. 27°

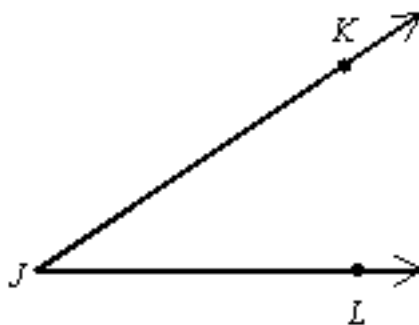
____ 13. Name an angle complementary to $\angle COD$.



- A. $\angle BOC$
- B. $\angle AOC$ or $\angle DOE$

- C. $\angle DOE$
- D. $\angle DOC$ or $\angle AOE$

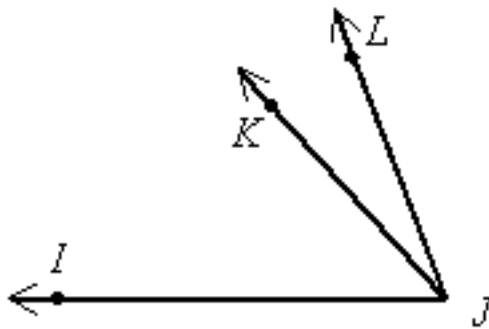
____ 14. Which does NOT describe the angle below?



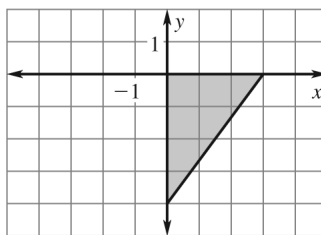
- A. $\angle LJK$
- B. $\angle KJL$

- C. $\angle JKL$
- D. $\angle J$

15. $m\angle LJK = (2x + 7)^\circ$ and $m\angle IJK = (7x - 1)^\circ$ and $m\angle LJI = 69^\circ$.
Find $m\angle LJK$ and $m\angle IJK$.

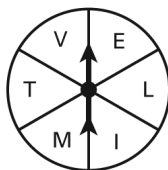


- A. $m\angle LJK = 42^\circ$ and $m\angle IJK = 27^\circ$
 B. $m\angle LJK = 48^\circ$ and $m\angle IJK = 21^\circ$
 C. $m\angle LJK = 21^\circ$ and $m\angle IJK = 48^\circ$
 D. $m\angle LJK = 27^\circ$ and $m\angle IJK = 42^\circ$
16. A system of inequalities is graphed below. Which of the ordered pairs is a solution of the inequality?

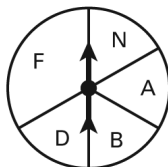


- A. $(2, -2)$
 B. $(4, 0)$
 C. $(1, -2)$
 D. $(0, 1)$
17. Christopher creates a spinner in which the probability of landing on a vowel (A, E, I, O, or U) is $\frac{1}{6}$. Which of the spinners shown represents this probability?

A. Four:



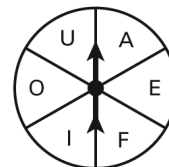
B. Three:



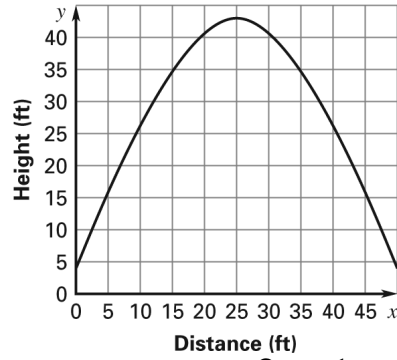
C. One:



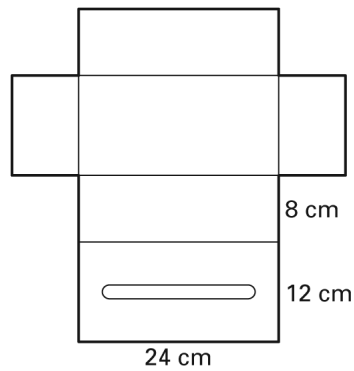
D. Two:



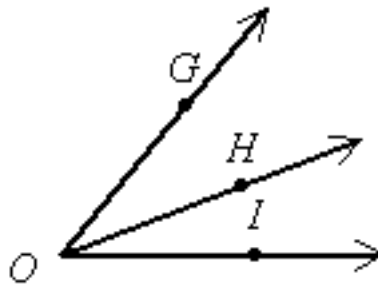
18. Mr. Jansen is coaching baseball. He hits a pop fly to the second baseman. The ball is hit and caught four feet above the ground. The path of the ball is part of a parabola as shown. What is the maximum height the ball reaches?



- A. 45 ft
B. 25 ft
C. $40\frac{1}{2}$ ft
D. $43\frac{2}{3}$ ft
19. Nick made the net shown to construct a tissue box. The area of the opening is 74 square centimeters. What is the amount of cardboard Nick needs to make the box? (Do not include the opening.)

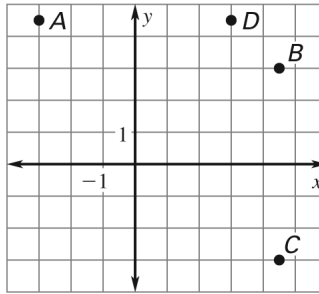


- A. 2156 cm^2
B. 2230 cm^2
C. 1936 cm^2
D. 1078 cm^2
20. If $m\angle HOI = 21^\circ$ and $m\angle GOI = 50^\circ$, then what is the measure of $\angle GOH$?



- A. 31°
B. 26°
C. 34°
D. 29°

____ 21. Which letter on the coordinate plane corresponds to the ordered pair $(-3, 4\frac{1}{2})$?

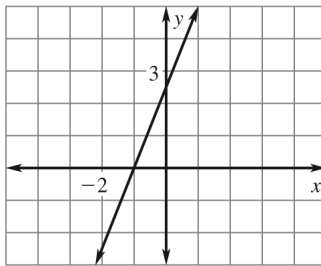


- A. C
B. D

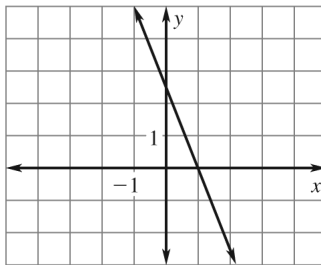
- C. B
D. A

____ 22. Which graph has an x-intercept of -1 and a y-intercept of $2\frac{1}{2}$?

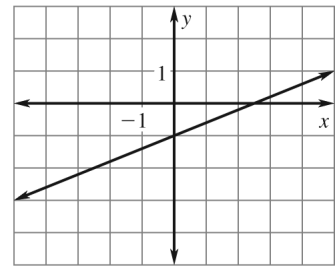
A. Graph 1:



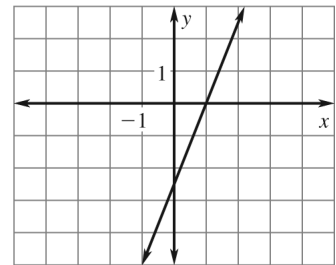
B. Graph 3:



C. Graph 4:



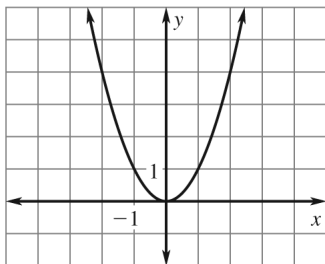
D. Graph 2:



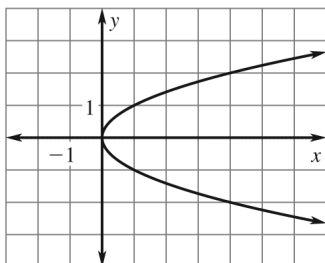
23. $\angle 1$ and $\angle 2$ are a linear pair. $m\angle 1 = 60^\circ$. Find $m\angle 2$.

24. Which graph is the graph of $y = x^2$?

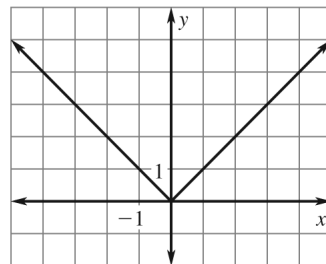
A. Graph 4:



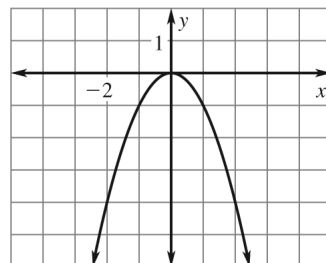
B. Graph 2:



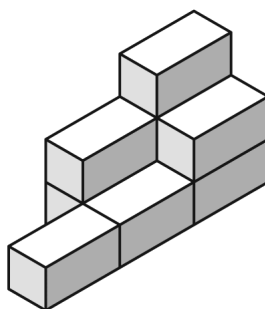
C. Graph 1:



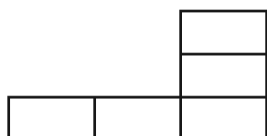
D. Graph 3:



25. The three dimensional figure shows the bricks that remained as James began removing bricks **from a stack**. Which view is the right side view of James's stack of bricks?



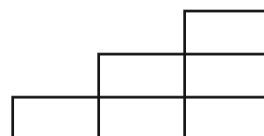
A. View 2:



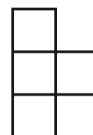
B. View 1:



C. View 4:



D. View 3:



26. Find the midpoint of the segment with endpoints $(-8, 5)$ and $(7, 6)$.

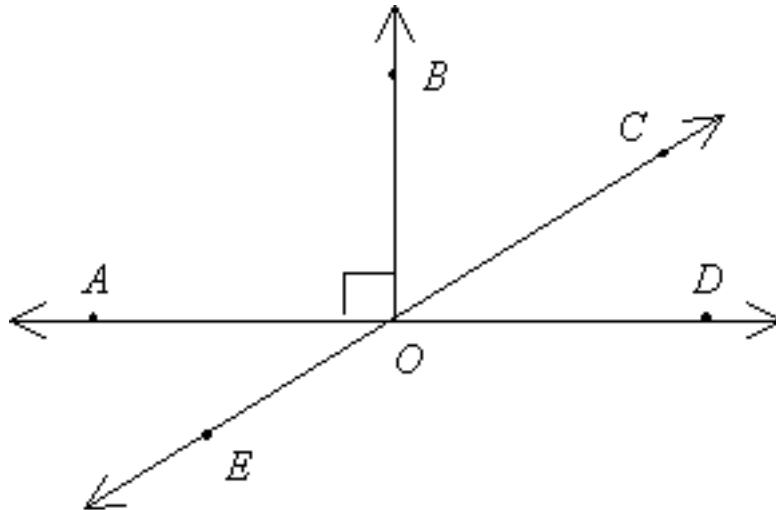
A. $(-13, 1)$

B. $\left(-\frac{1}{2}, \frac{11}{2}\right)$

C. $\left(-\frac{15}{2}, -\frac{1}{2}\right)$

D. $\left(-\frac{3}{2}, \frac{13}{2}\right)$

____ 27. Name an angle supplementary to $\angle AOC$.

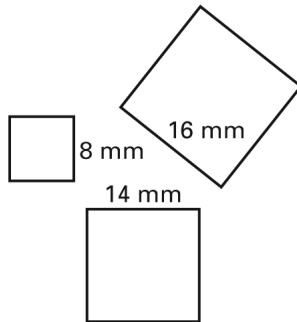


- A. $\angle DOB$
- B. $\angle DOE$

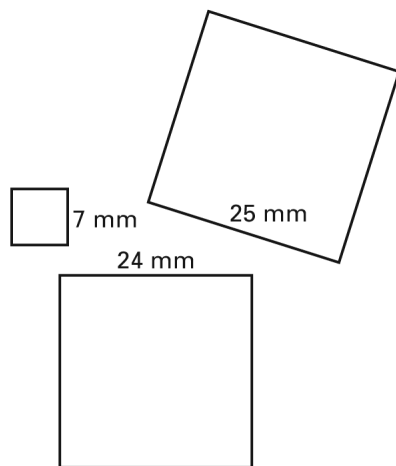
- C. $\angle BOE$ or $\angle EOD$
- D. $\angle COD$ or $\angle AOE$

____ 28. Which of the following models will form a right triangle?

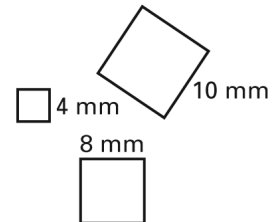
A. Model 2:



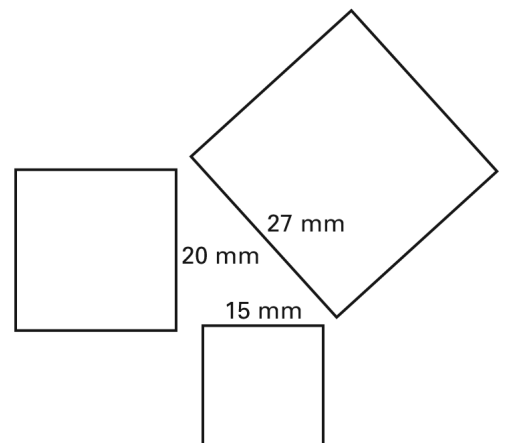
B. Model 4:



C. Model 3:

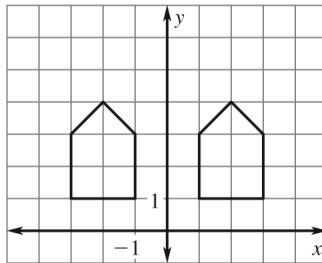


D. Model 1:



Answer Key

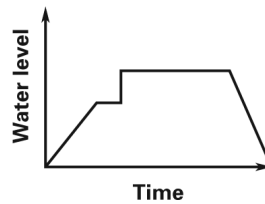
1. $(-2, -2)$
2. **C.** $(\frac{5}{2}, -3)$
3. **A.** Graph 2:



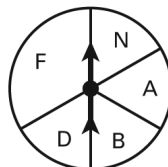
4. **C.** acute
5. **C.** Table 2:

x	y
-5	4
-2	3
0	3
1	0

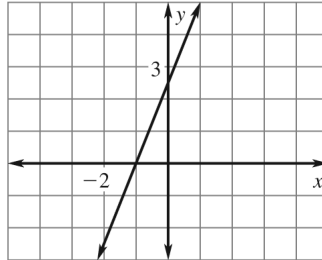
6. **B.** $y = -\frac{3}{4}x + \frac{15}{4}$
7. **A.** There are no real roots.
8. **A.** $21b + 20m - 57s$
9. **A.** $(4, 5)$
10. **D.** r
11. **D.** Graph 4:



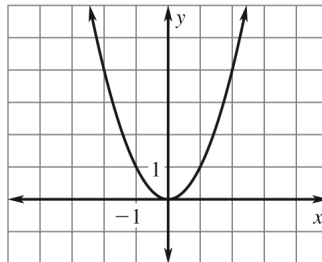
12. **C.** 30°
13. **A.** $\angle BOC$
14. **C.** $\angle JKL$
15. **C.** $m\angle LJK = 21^\circ$ and $m\angle IJK = 48^\circ$
16. **C.** $(1, -2)$
17. **B.** Three:



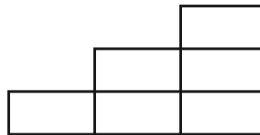
18. **D.** 43 ft
 19. **D.** 1078 cm²
 20. **D.** 29°
 21. **D.** A
 22. **A.** Graph 1:



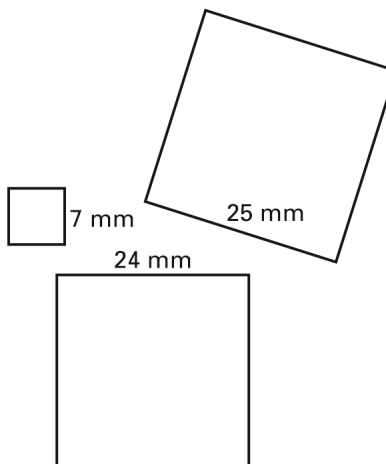
23. 120
 24. **A.** Graph 4:



25. **C.** View 4:

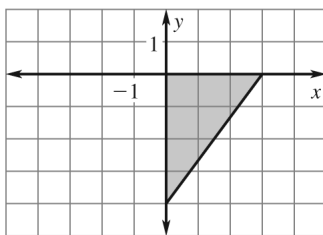


26. **B.** $\left(-\frac{1}{2}, \frac{11}{2}\right)$
 27. **D.** $\angle COD$ or $\angle AOE$
 28. **B.** Model 4:



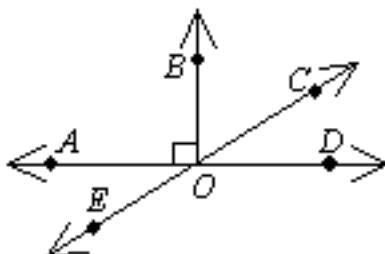
Name: _____ Teacher: _____ Date: _____
 Period: _____ Score Needed on Final: _____

____ 1. A system of inequalities is graphed below. Which of the ordered pairs is a solution of the inequality?



- A. $(0, 1)$
 B. $(1, -2)$
 C. $(4, 0)$
 D. $(2, -2)$

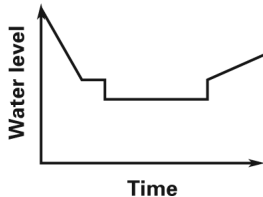
____ 2. Name an angle complementary to $\angle COD$.



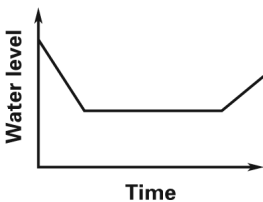
- A. $\angle DOE$
 B. $\angle AOC$ or $\angle DOE$
 C. $\angle BOC$
 D. $\angle DOC$ or $\angle AOE$

____ 3. Tyler is running water in the bathtub to take his bath. He runs the water in the tub, then waits five minutes, then gets in. Which graph represents Tyler running the water, getting in the tub, then letting the water out?

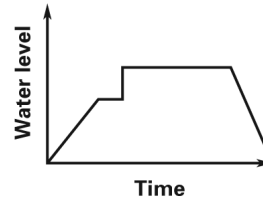
A. Graph 1:



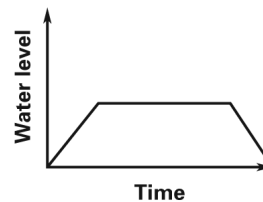
B. Graph 2:



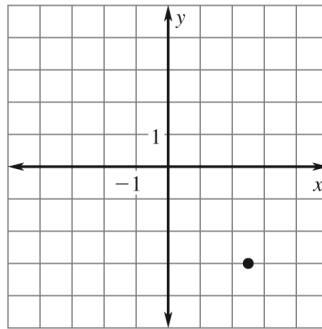
C. Graph 4:



D. Graph 3:



____ 4. Which ordered pair is shown on the coordinate plane?



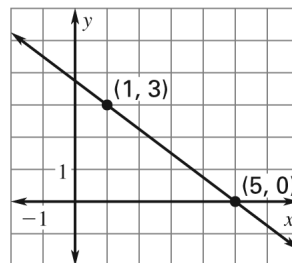
A. $(\frac{5}{2}, -3)$

B. $(-\frac{5}{2}, 3)$

C. $(-\frac{5}{2}, -3)$

D. $(\frac{5}{2}, 3)$

____ 5. Nathan was practicing graphing ordered pairs on a coordinate grid. He graphed the two ordered pairs on the coordinate grid as shown and connected them to form a line. What is the equation of the line that is graphed?



A. $y = \frac{3}{4}x + \frac{15}{4}$

B. $y = -\frac{3}{4}x + \frac{15}{4}$

C. $y = -\frac{4}{3}x + 5$

D. $y = -\frac{4}{3}x - \frac{4}{5}$

____ 6. Find the midpoint of the segment with endpoints (5, 8) and (3, 2).

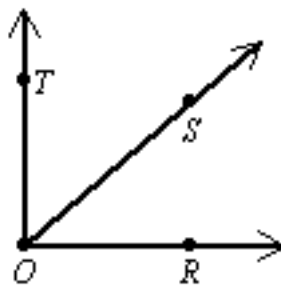
A. (1, 3)

B. (-3, 1)

C. (4, 5)

D. $(\frac{13}{2}, \frac{5}{2})$

____ 7. If angle TOS is acute and angle TOR is right, then angle ROS is what kind of angle?



A. right

B. obtuse

C. straight

D. acute

8. Which table represents a function?

A. Table 3:

x	y
-5	3
0	5
0	9
1	5

B. Table 4:

x	y
-7	2
-7	-3
4	-5
7	1

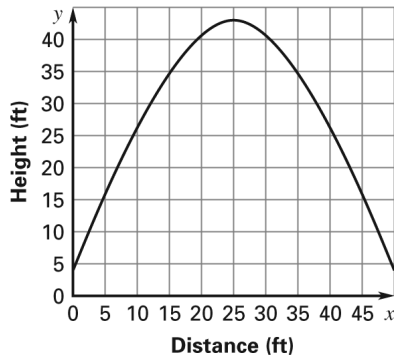
C. Table 1:

x	y
-6	3
-5	4
2	6
2	9

D. Table 2:

x	y
-5	4
-2	3
0	3
1	0

9. Mr. Jansen is coaching baseball. He hits a pop fly to the second baseman. The ball is hit and caught four feet above the ground. The path of the ball is part of a parabola as shown. What is the maximum height the ball reaches?

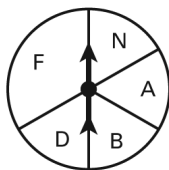


- A. 43 ft
B. 45 ft

- C. 25 ft
D. $40\frac{1}{2}$ ft

10. Christopher creates a spinner in which the probability of landing on a vowel (A, E, I, O, or U) is $\frac{1}{6}$. Which of the spinners shown represents this probability?

A. Three:



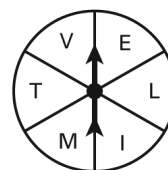
B. Two:



C. One:



D. Four:



11. Simplify the expression $7(3b + 2m - 6s) - 3(5s - 2m)$.

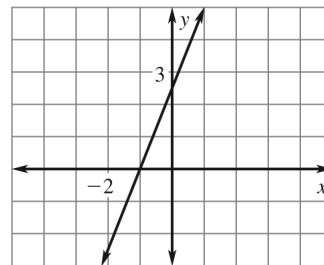
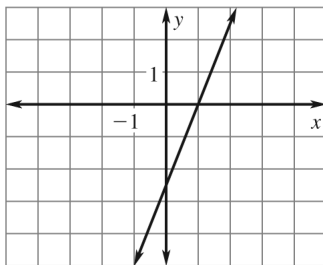
- A. $21b + 14m + 57s$
B. $21b + 20m - 57s$

- C. $21b + 8m - 27s$
D. $-21b + 20m + 27s$

12. Which graph has an x-intercept of -1 and a y-intercept of $2\frac{1}{2}$?

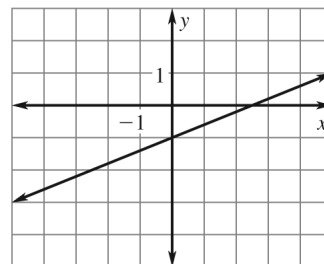
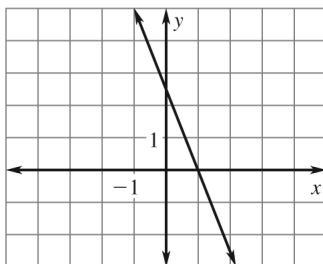
A. Graph 2:

C. Graph 1:

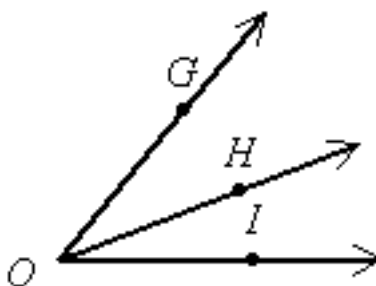


B. Graph 3:

D. Graph 4:



13. If $m\angle HOI = 21^\circ$ and $m\angle GOI = 50^\circ$, then what is the measure of $\angle GOH$?



- A. 29°
- B. 31°

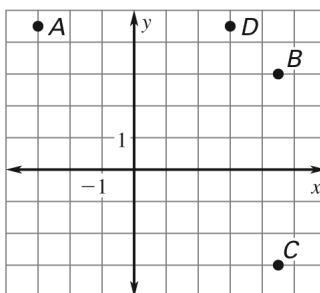
- C. 26°
- D. 34°

14. The formula for the circumference of a circle is $c = 2\pi r$. In this equation, what is the independent variable?

- A. C
- B. π

- C. r
- D. 2

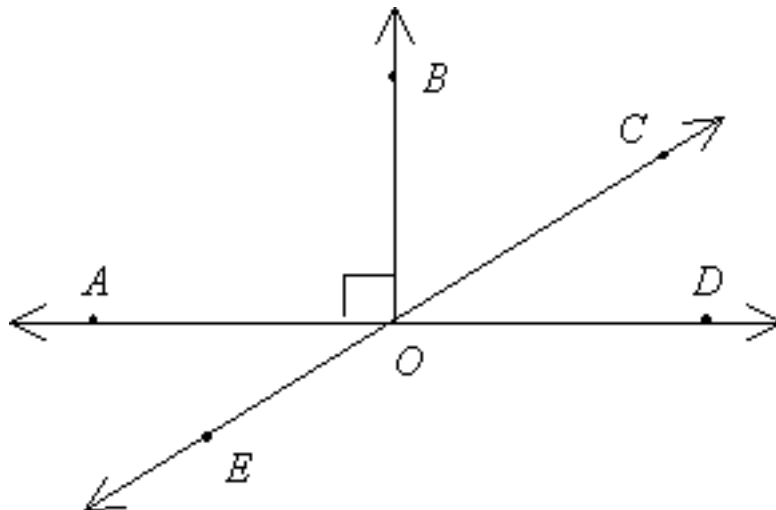
15. Which letter on the coordinate plane corresponds to the ordered pair $(-3, 4\frac{1}{2})$?



- A. B
- B. C

- C. D
- D. A

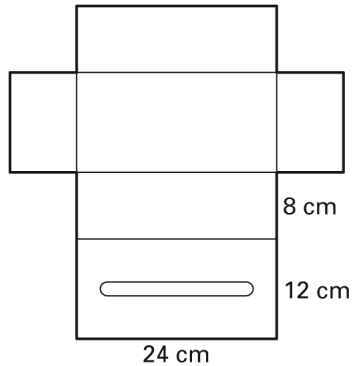
____ 16. Name an angle supplementary to $\angle AOC$.



- A. $\angle BOE$ or $\angle EOD$
 B. $\angle DOB$

- C. $\angle DOE$
 D. $\angle COD$ or $\angle AOE$

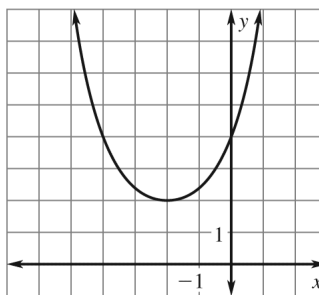
____ 17. Nick made the net shown to construct a tissue box. The area of the opening is 74 square centimeters. What is the amount of cardboard Nick needs to make the box? (Do not include the opening.)



- A. 2156 cm^2
 B. 1078 cm^2

- C. 1936 cm^2
 D. 2230 cm^2

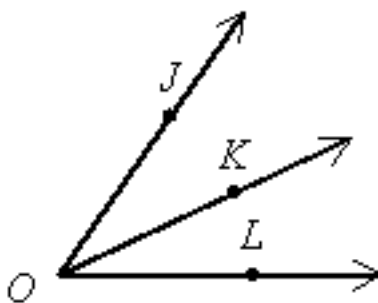
____ 18. Shawn graphed a quadratic function as shown. By examining the graph, what can be determined about the roots of the related quadratic equation?



- A. There are no real roots.
 B. There are two real roots

- C. Not here
 D. There is one real root.

____ 19. If $m\angle KOL = 25^\circ$ and $m\angle JOL = 55^\circ$, then what is the measure of $\angle JOK$?

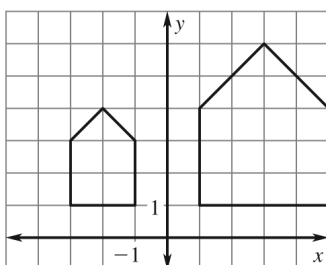


- A. 27°
- B. 28°

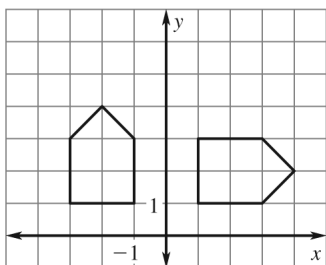
- C. 30°
- D. 35°

____ 20. Mrs. Crampton is creating a scrapbook for her daughter. She wants the placement of the photo on the left hand page to be reflected on the right hand page. Which graph shows Mrs. Crampton reflecting the photo?

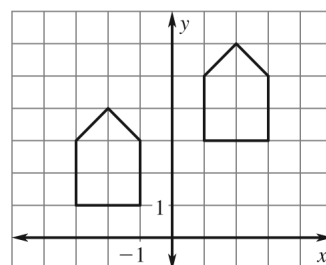
A. Graph 4:



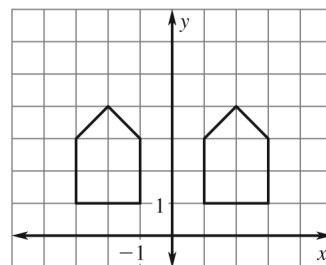
B. Graph 1:



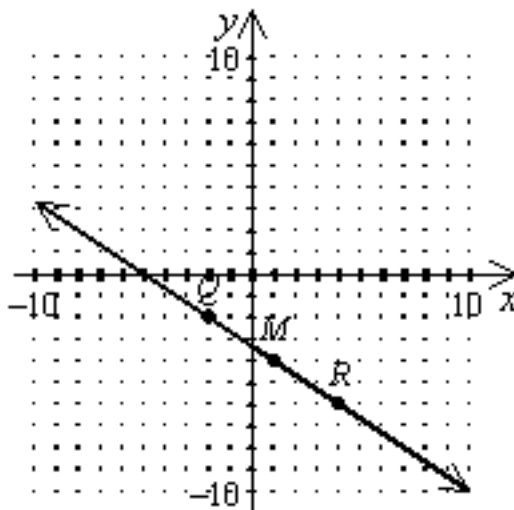
C. Graph 3:



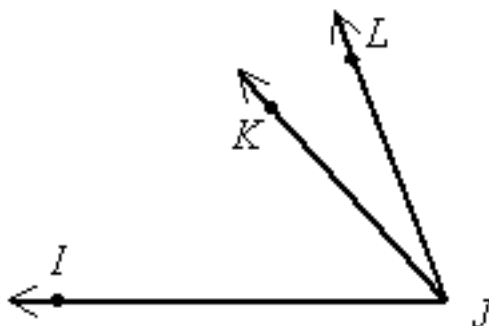
D. Graph 2:



21. The midpoint of \overline{QR} is $M(1, -4)$. One endpoint is $R(4, -6)$. Find the coordinates of the other endpoint.

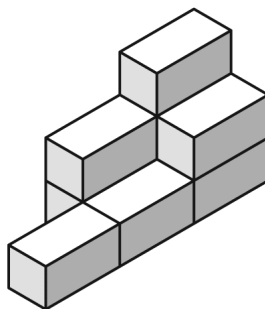


22. $m\angle LJK = (2x + 7)^\circ$ and $m\angle IJK = (7x - 1)^\circ$ and $m\angle LJI = 69^\circ$.
Find $m\angle LJK$ and $m\angle IJK$.

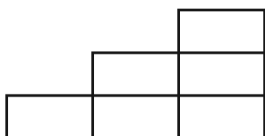


- | | |
|--|--|
| A. $m\angle LJK = 42^\circ$ and $m\angle IJK = 27^\circ$ | C. $m\angle LJK = 21^\circ$ and $m\angle IJK = 48^\circ$ |
| B. $m\angle LJK = 48^\circ$ and $m\angle IJK = 21^\circ$ | D. $m\angle LJK = 27^\circ$ and $m\angle IJK = 42^\circ$ |

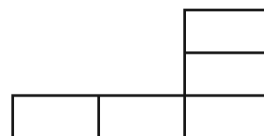
- ____ 23. The three dimensional figure shows the bricks that remained as James began removing bricks **from a stack**. Which view is the right side view of James's stack of bricks?



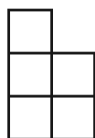
A. View 4:



C. View 2:



B. View 3:

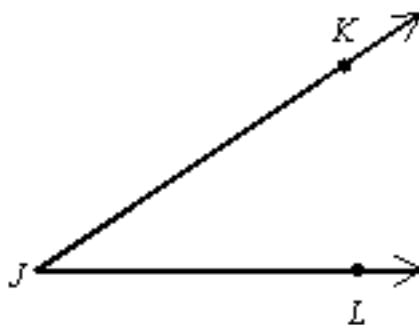


D. View 1:



24. $\angle 1$ and $\angle 2$ are a linear pair. $m\angle 1 = 60^\circ$. Find $m\angle 2$.

- ____ 25. Which does NOT describe the angle below?

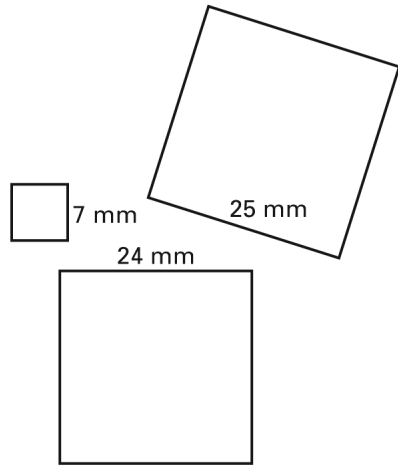


- A. $\angle JKL$
B. $\angle KJL$

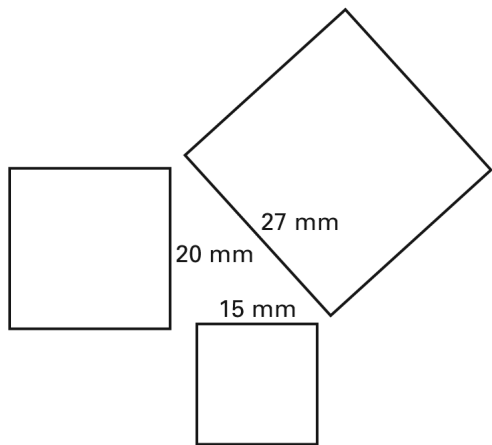
- C. $\angle J$
D. $\angle LJK$

____ 26. Which of the following models will form a right triangle?

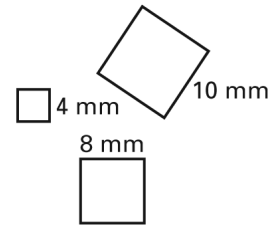
A. Model 4:



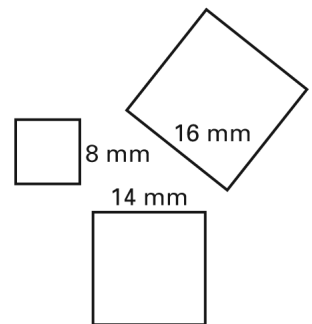
B. Model 1:



C. Model 3:



D. Model 2:



____ 27. Find the midpoint of the segment with endpoints $(-8, 5)$ and $(7, 6)$.

A. $\left(-\frac{3}{2}, \frac{13}{2}\right)$

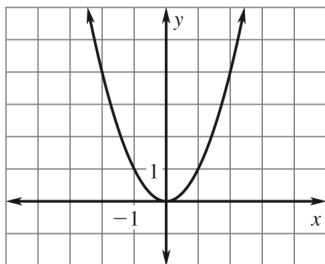
B. $\left(-\frac{15}{2}, -\frac{1}{2}\right)$

C. $(-13, 1)$

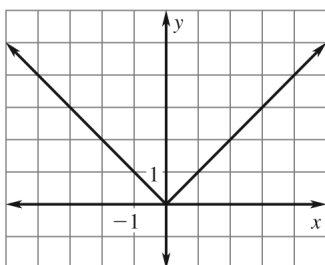
D. $\left(-\frac{1}{2}, \frac{11}{2}\right)$

28. Which graph is the graph of $y = x^2$?

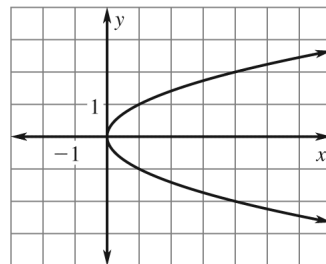
A. Graph 4:



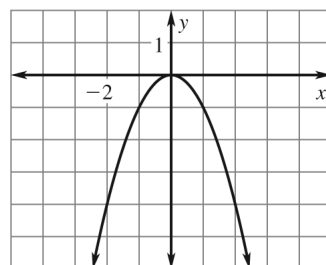
B. Graph 1:



C. Graph 2:

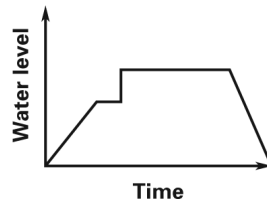


D. Graph 3:



Answer Key

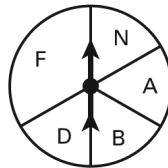
1. **B.** $(1, -2)$
2. **C.** $\angle BOC$
3. **C.** Graph 4:



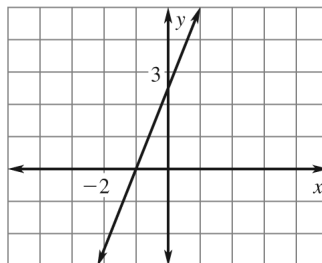
4. **A.** $(\frac{5}{2}, -3)$
5. **B.** $y = -\frac{3}{4}x + \frac{15}{4}$
6. **C.** $(4, 5)$
7. **D.** acute
8. **D.** Table 2:

x	y
-5	4
-2	3
0	3
1	0

9. **A.** 43 ft
10. **A.** Three:



11. **B.** $21b + 20m - 57s$
12. **C.** Graph 1:

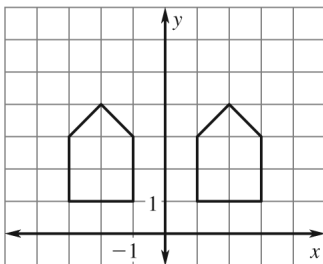


13. **A.** 29°
14. **C.** r
15. **D.** A
16. **D.** $\angle COD$ or $\angle AOE$
17. **B.** 1078 cm^2

18. **A.** There are no real roots.

19. **C.** 30°

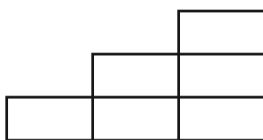
20. **D.** Graph 2:



21. $(-2, -2)$

22. **C.** $m\angle LJK = 21^\circ$ and $m\angle IJK = 48^\circ$

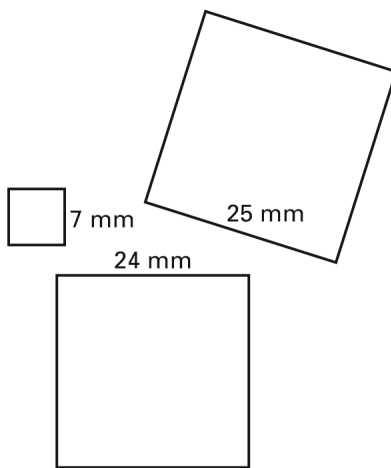
23. **A.** View 4:



24. 120

25. **A.** $\angle JKL$

26. **A.** Model 4:



27. **D.** $\left(-\frac{1}{2}, \frac{11}{2}\right)$

28. **A.** Graph 4:

