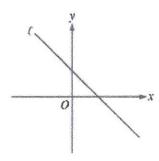
#16

Click on your choices.



The figure shows line ℓ in the xy-plane. Line k (not shown) is perpendicular to line ℓ . Which of the following statements could be true?

Indicate all such statements.

☐ The slope of line k is less than 0		The	slope	of	line	kis	less	than	0
--------------------------------------	--	-----	-------	----	------	-----	------	------	---

- The x-intercept of line k is less than 0.
- \square The y-intercept of line k is less than 0

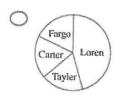
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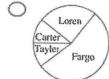
Answer the question by clicking on the correct response.

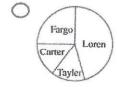
TOTAL AR	EA OF JOHNSTON COUNT	Y, BY TOWNSHIF
Township	Land Area (square miles)	Percent of Total
Fargo	46.6	25%
Loren	83.9	45%
Carter	28.1	15%
Tayler	27.9	15%
Total	186.5	100%

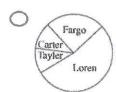
X

Which of the following circle graphs best represents the distribution of land area in Johnston County as shown in the table above?









#19

Answer the question by clicking on the correct response.

Set A consists of all integers that are prime numbers. Set B consists of all 2-digit positive integers that are
less than 70 and have a units digit of 7. How many integers are members of both set A and set B?

O 3

0 4

O 5

() 6

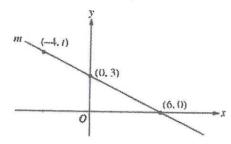
#18

Click on your choices.

Which of the following statements describe the graph of the function $3x - 4y = 12$ in the xy-coordina plane?
Select all that apply.
\square The slope of the line is $-\frac{4}{3}$.
\square The slope of the line is $\frac{3}{4}$.
The x-intercept is 3.
☐. The x-intercept is 4.
☐ The <i>y</i> -intercept is —4.
☐ The <i>y</i> -intercept is −3.

#20

Answer the question by clicking on the correct response.



The point with coordinates (-4, t) lies on line m in the xy-plane, as shown above. What is the value of t?

- 0 4
- O 5
- O 9
- O 14

#21

Click on the answer box and type in a number. Backspace to erase.

The sum of three consecutive integers is 19 less than four times the smallest integer. What is the value of the middle integer?

Answer the question by clicking on the correct response.

Scores	Number of Students
100	1
90-99	4
80-89	7
70-79	6
60-69	5

The to	able shows the French midterm test scores of 23 students. Based on the information given, which o llowing values can be determined?
0	The lowest score
0	The highest score
0	The mean score
0	The median score

Answer the question by clicking on the correct response.

Which of the following is an equation of a line that is perpendicular to the line y = 2x + 13?

$$y = -2x + 6$$

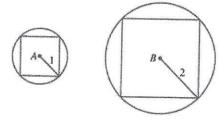
$$O_{y=-\frac{1}{2}x+3}$$

$$O_{y=\frac{1}{2}x+3}$$

$$\bigcirc y = 2x + 6$$

#24

Answer the question by clicking on the correct response.



A square is inscribed in each of the circles above. The radius of circle A is 1, and the radius of circle B is 2. What is the ratio of the area of the square inscribed in circle A to the area of the square inscribed in circle B?

- O 1:√2
- O 1:2
- O 1:2√2
- O1:4

#25

Click on your choices.

Γ	θ	ct	15
ſ	c/	el	b
	h	b	d

The t	able above defines an operation \oplus on the set $S=\{a,b\}$. Which of the following is true about S under operation \oplus ?
Selec	at all that apply.
	S is commutative.
	S is closed.
	There is an element of S that does not have an inverse.
	S contains an identity.

#26

Answer the question by clicking on the correct response.

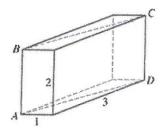
Stem	Leaf
12	0.2
13	1,3,3
14	2,4,5,8
15	0, 1, 4, 7, 7, 9
16	2, 8, 8
17	1,6,9
18	0,0,4
19	5

Key: 13 1 = 131 pounds

The weights, in pounds, of the 25 members of a fitness club are shown in the stem-and-leaf plot. What percent of the club members weigh less than 155 pounds?
○ 36%
O 48%
O 52%
O 64%

#27

Answer the question by clicking on the correct response.



A rectangular solid with dimensions 1, 2, and 3 is shown above. What is the area of the cross section ABCD?

- $\bigcirc 2\sqrt{10}$
- $\bigcirc 2\sqrt{13}$
- ○3√5
- 0 8

#28

Answer the question by clicking on the correct response.

According to a survey of 100 students, 73 students took a math course and 57 took a music course. Of those surveyed, 22 reportedly took a math course but not a music course. How many students took neither a music course nor a math course?

0.6

O 21

() 30

O 51

Answer the question by clicking on the correct response.

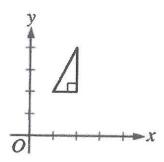
$B \mid D \mid E \mid F$

The *T*-shaped figure above consists of six congruent squares. A coin will be placed randomly on one of the squares. It will then be moved randomly to a square that is adjacent to the square on which it was originally placed. What is the probability that after the coin has been moved, it will be on square *E*? (Two squares are adjacent if they share a common side.)

- $O^{\frac{1}{3}}$
- $\bigcirc \frac{1}{4}$
- $O_{\frac{1}{6}}$
- $O_{\frac{1}{12}}$

#30

Answer the question by clicking on the correct response.



The triangle shown in the xy-plane is to be reflected about the y-axis and then reflected about the line y=x. Which of the following would be the result of the reflections?

