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No
Calculator

134080403_4

2

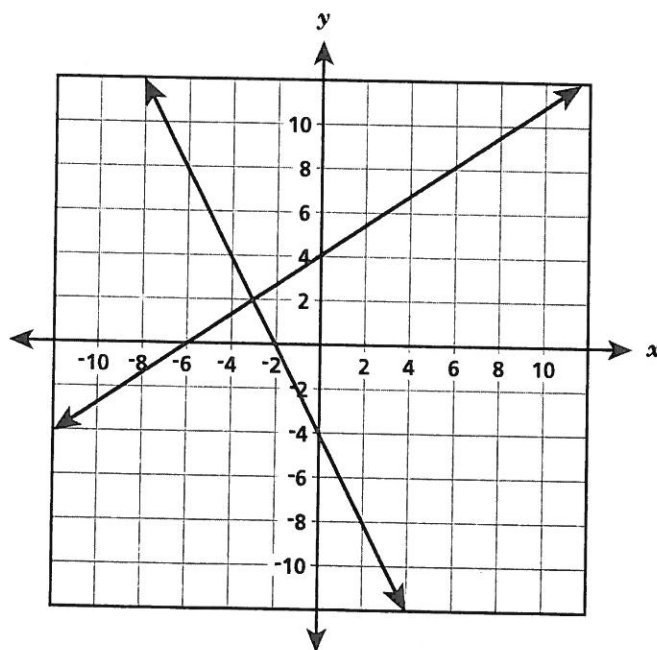
The speed of light in a vacuum is 299,792,458 meters per second. Which number, written in scientific notation, is the **best** approximation of the speed of light?

- A 0.3×10^7 meters per second
- B 0.3×10^8 meters per second
- C 3.0×10^7 meters per second
- D 3.0×10^8 meters per second

144080041_2

5

The graph of a system of linear equations is shown below.



Which ordered pair is the **best** estimate for the solution of this system of linear equations?

- A $(-6, -2)$
- B $(-3, 2)$
- C $(4, -4)$
- D $(6, 8)$



144080042_3

12

Jenny wants to rent a truck for one day. She contacted two companies. Laguna's Truck Rentals charges \$20 plus \$2 per mile. Salvatori's Truck Rentals charges \$3 per mile. After how many miles will the total cost for both companies be the same?

- A 4
- B 6
- C 20
- D 60

124080501_1

27

Which exponential expression is equal to $2^{-5} \cdot 2^8$?

- A $\frac{2^2}{2^{-1}}$
- B $(2^3)^{-1}$
- C $\frac{2^{-2}}{2^{-1}}$
- D $(2^{-1})^3$

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6

Which equation does **not** represent a linear function?

A $y = 2(x - 3)$

B $y = 2^2 - 3x$

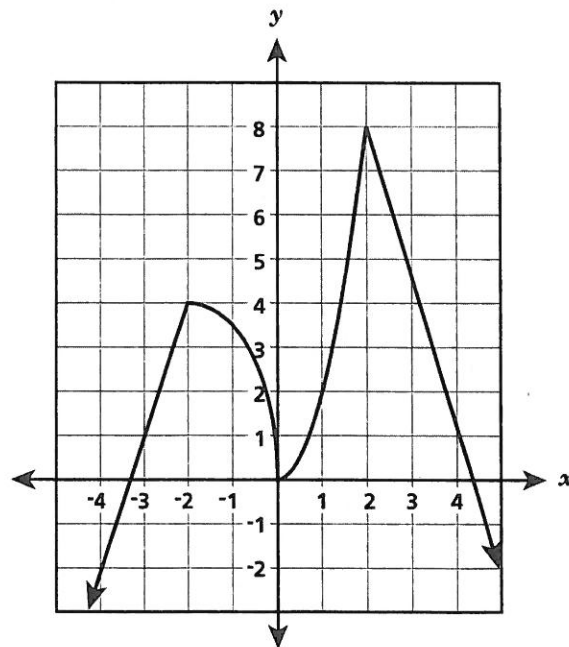
C $y = \frac{x+1}{5}$

D $y = 2x^2 + 3x$

144080069_2

9

The graph of a function is shown below.



For which interval of x is the function decreasing and nonlinear?

A between -4 and -2

B between -2 and 0

C between 0 and 2

D between 2 and 4

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144080062_1

16

The cost to rent a paddleboat at the city park includes an initial fee of \$7.00, plus \$3.50 per hour. Which equation models the relationship between the total cost, y , and the number of hours, x , that the paddleboat is rented?

A $y = 3.5x + 7$

B $y = 7x + 3.5$

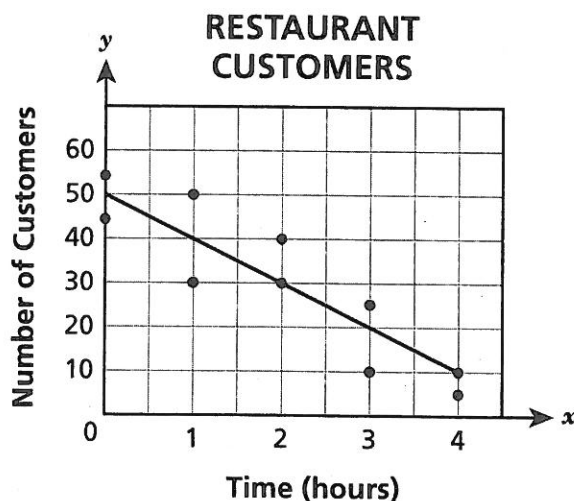
C $y = \frac{x}{7} + 3.5$

D $y = \frac{x}{3.5} + 7$

144080110_1

20

The scatter plot below shows the numbers of customers in a restaurant for four hours of the dinner service on two different Saturday nights. The line shown models this relationship, and $x = 0$ represents 7 p.m.

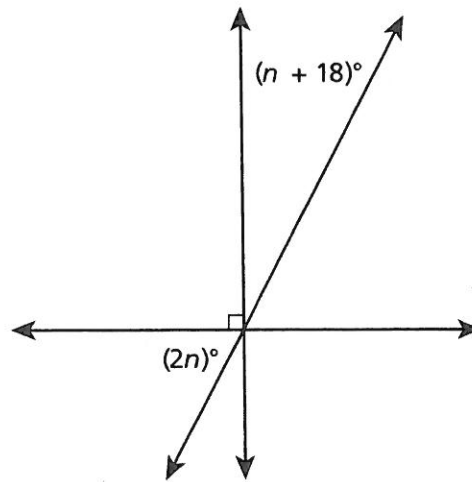


What does the value of the y -intercept represent?

- A the average number of customers at 7 p.m.
- B the average number of customers at 11 p.m.
- C the average change in the number of customers each hour
- D the average change in the number of customers during four hours of the dinner service

144070089_2

- 15** What is the value of n in the diagram below?



[not drawn to scale]

- A** 18
- B** 24
- C** 42
- D** 48

144080092_3

- 25** Triangle M is similar to triangle N. Triangle M has two angles with measures of 32° and 93° . Which two angle measures could be included in triangle N?

- A** 32° and 58°
- B** 32° and 74°
- C** 93° and 55°
- D** 93° and 87°

