

SEL

Social-Emotional Learning

## Entry Level Assessment

1. Sophia had \$50 she put into a savings account. If she saves \$15 per week for one year, how much will she have saved altogether?

$$A_s = 50 + 15w$$

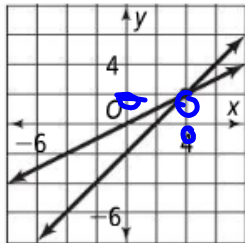
$$50 + 780$$

- A \$50                       C \$780  
 B \$65                       D \$830

2. Which set below is the domain of  $\{(2, -3), (-1, 0), (0, 4), (-1, 5), (4, -2)\}$ ?

- F  $\{-3, 0, 4, 5, -2\}$                        H  $\{2, -1, 4\}$   
 G  $\{-3, 4, 5, -2\}$                        I  $\{2, -1, 0, 4\}$

3. Which ordered pair is the solution of the system of equations graphed below?



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

4. The Martins keep goats and chickens on their farm. If there are 23 animals with a total of 74 legs, how many of each type of animal are there?

- F 14 chickens, 9 goats
- G 19 chickens, 4 goats
- H 9 chickens, 14 goats
- I 4 chickens, 19 goats

sub.  
 $g = 23 - c$

$$4(23 - c) + 2c = 74$$

$$\begin{aligned} 2(g + c) &= 23 \\ 4g + 2c &= 74 \end{aligned}$$

$$\begin{aligned} 2g &= 28 \\ \frac{2g}{2} &= \frac{28}{2} \\ g &= 14 \end{aligned}$$

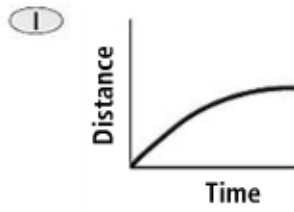
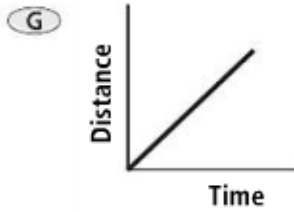
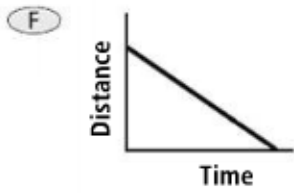
5. Which equation represents the phrase "six more than twice a number is 72"?

- A  $6 + x = 72$
- B  $2x = 6 + 72$
- C  $2 + 6x = 72$
- D  $6 + 2x = 72$

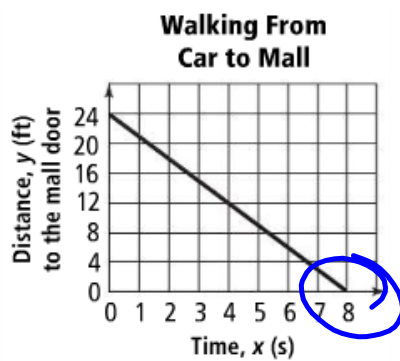
$$\begin{aligned} 92 - 4c + 2c &= 74 \\ -2c &= -18 \\ c &= 9 \end{aligned}$$

ELIMINATION

6. Which of the following graphs best represents a person walking slowly and then speeding up?



7. The graph below shows the time it takes Sam to get from his car to the mall door.



Which of the following best describes the  $x$ -intercept?

- A Sam's car was parked 24 ft from the mall door.
- B After 24 s, Sam reached the mall door.
- C Sam's car was parked 8 ft from the mall door.
- D After 8 s, Sam reached the mall door.
8. What is  $237,000$  written in standard notation?
- F 0.00237
- G 0.0237
- H 237,000
- I 2,370,000

9. What equation do you get when you solve  $2x + 3y = 12$  for  $y$ ?

- A  $y = -\frac{2}{3}x + 4$
- B  $y = -\frac{2}{3}x + 12$
- C  $y = -2x + 12$
- D  $y = 12 - 2x$

$$\begin{aligned} 3y &= 12 - 2x \\ y &= \frac{12}{3} - \frac{2}{3}x \end{aligned}$$

10. The formula for the circumference of a circle is  $C = 2\pi r$ . What is the formula solved for  $r$ ?

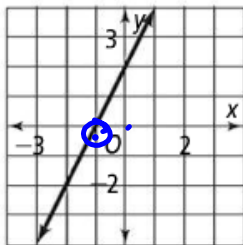
- F  $r = C \cdot 2\pi$
- G  $r = \frac{C}{2\pi}$
- H  $r = 2\pi$
- I  $r = \frac{C\pi}{2}$

$$y = -\frac{2}{3}x + 4$$

$$\begin{aligned} C &= 2\pi r \\ \frac{C}{2\pi} &= \frac{2\pi r}{2\pi} \\ r &= \frac{C}{2\pi} \end{aligned}$$

11. Which table of values was used to make the following graph?

$(-1, 0)$



(A)

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

(B)

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

(C)

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

(D)

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

12. A jewelry store marks up the price of a topaz ring 215%. The store paid \$70 for the ring. For how much is the store selling the ring?

- (F) \$91.50
- (G) \$150.50
- (H) \$161.50
- (I) \$220.50

$$SP = 70 + 2.15(70)$$

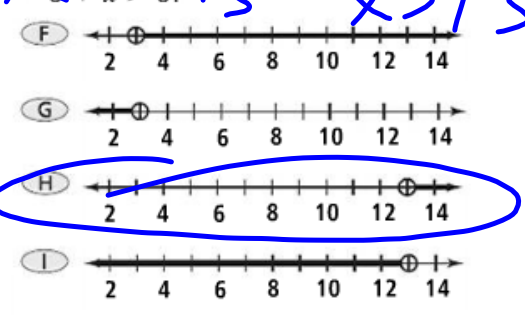
$$70 + 150.50$$

$$220.50$$

13. What is the solution of  $-3p + 4 < 22$ ?  
 (A)  $p < -6$  (C)  $p < 18$   
 (B)  $p > -6$  (D)  $p > 18$

$$\begin{aligned} -3p + 4 &< 22 \\ -4 &-4 \\ \hline -3p &< 18 \\ \hline p &> -6 \end{aligned}$$

14. Which of the graphs below shows the solution of  $5 + x > 8$ ?  $+5$   $x > 3$



15. Between which two whole numbers does  $\sqrt{85}$  fall?  
 (A) 8 and 9 (C) 11 and 12  
 (B) 9 and 10 (D) 42 and 43

$$\begin{aligned} 42^2 &= 1764 \\ 8^2 &= 64 \\ 9^2 &= 81 \\ 10^2 &= 100 \end{aligned}$$

16. What is the simplified form of  $\frac{6 + 3^2}{(2^3)(3)}$ ?  
 (F)  $\frac{1}{3}$  (H)  $\frac{5}{8}$   
 (G)  $\frac{1}{2}$  (I)  $\frac{5}{6}$

$$\begin{aligned} 3^2 &= 3 \cdot 3 = 9 \\ 2^3 &= 2 \cdot 2 \cdot 2 \\ \frac{6 + 9}{8 \cdot 3} &= \frac{15}{24} = \frac{5}{8} \end{aligned}$$



17. Which of the following expressions is equivalent to  $\frac{4^3}{4^6}$ ?

A  $\frac{1}{4^3}$

C  $4^2$

B  $\frac{1}{4^2}$

D  $4^3$

$$4^{3-6} = 4^{-3} = \frac{1}{4^3}$$

18. What is 40,500,000 written in scientific notation?

F  $4.05 \times 10^7$

H  $4.05 \times 10^{-6}$

G  $4.05 \times 10^6$

I  $4.05 \times 10^{-7}$

19. There are  $3\frac{3}{4}$  c of flour,  $1\frac{1}{2}$  c of sugar,  $\frac{2}{3}$  c of brown sugar, and  $\frac{1}{4}$  c of oil in a cake mix. How many cups of ingredients are there in all?

A  $4\frac{1}{2}$  c

C  $5\frac{1}{2}$  c

B  $5\frac{1}{6}$  c

D  $6\frac{1}{6}$  c