

## A.1

1.

Pauline sells cookie baskets. She charges \$5 for the basket plus \$2 per cookie. If one filled basket sells for \$31, how many cookies are in it?

- F 13  
G 15  
H 18  
J 20

2.

What is the solution to  $3(x - 5) \geq 12$ ?

- F  $x \leq 1$   
G  $x \geq -1$   
H  $x \geq \frac{17}{3}$   
J  $x \geq 9$

3.

Mary published her first book. She was given \$10,000.00 and an additional \$0.10 for each copy of the book that sold. Her earnings,  $d$ , in dollars, from the publication of her book are given by

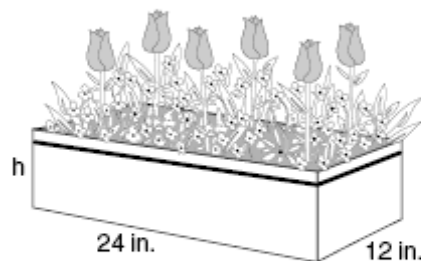
$$d = 10,000 + 0.1n$$

where  $n$  is the number of copies sold. During the first year Mary earned \$35,000.00 from the publication and sale of her book. How many copies of her book sold in the first year?

- F 25,000  
G 35,000  
H 250,000  
J 350,000

4.

A rectangular planter can hold 2,304 cubic inches of soil. The dimensions of the base of the planter are 24 inches by 12 inches.



What is the height of the planter?

- F 4 inches  
G 8 inches  
H 16 inches  
J 192 inches

5.

What is the solution to  $12 - \frac{1}{9}d = 17$ ?

- F  $d = -243$   
G  $d = -45$   
H  $d = -3$   
J  $d = \frac{-5}{9}$

6.

What is the solution to

$$2 - 4a = 16?$$

- F 18  
G 10  
H  $-\frac{7}{2}$   
J  $-\frac{9}{2}$

7.

The volume of a cylinder is given by

$$V = \pi r^2 h$$

where  $r$  is the radius of the cylinder and  $h$  is the cylinder's height. Which equation could be used to solve for  $h$ ?

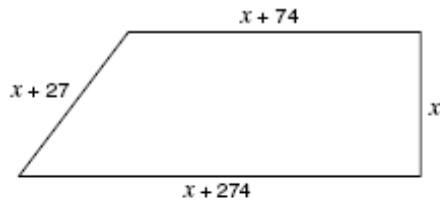
A  $h = \pi r^2 V$

B  $h = \frac{V}{\pi r^2}$

C  $h = V + \pi r^2$

D  $h = V - \pi r^2$

8.



Tambria's property has the shape of a trapezoid with the dimensions shown. If the perimeter of the property is 3,279 feet, what is the value of  $x$ ?

F 726 ft

G 781.25 ft

H 913.5 ft

J 1,452 ft

9.

What is the solution to

$$5 - \frac{n}{2} = 12?$$

F -34

G -14

H 14

J 34

10.

What is the solution to the inequality

$$7x - 5 \geq x + 1?$$

F  $x \leq 1$

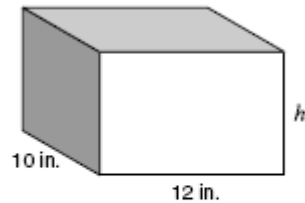
G  $x \geq 1$

H  $x \geq -1$

J  $x \leq \frac{5}{2}$

11.

The volume of a rectangular solid is 960 cubic inches. The dimensions of the base are 12 inches by 10 inches.



What is the height of the solid?

A 4 in.

B 8 in.

C 120 in.

D 840 in.

12.

What is the solution to  $2x + 3 \geq x - 5$ ?

F  $x \geq \frac{-8}{3}$

G  $x \geq -8$

H  $x \geq \frac{-2}{3}$

J  $x \geq -2$