1-8 Standardized Test Prep

An Introduction to Equations

Multiple Choice

For Exercises 1–5, choose the correct letter.

1. Which equation is true?

A. $25 - (-18) = 7$

B. $\frac{1}{3}(-9) - 6 = -9$

C. $25(-2) + 7 = -39 + 4$

D. $-19 + 8(-2) = -7(-5)$

2. Which equation has a solution of -6?

F. $15x - 20 = 70$ **G.** $14 = 6x - 22$ **H.** $3x - 8 = -10$ **I.** $\frac{1}{2}x - 8 = -11$

3. Which equation has a solution of $\frac{1}{2}$?

A. $13x - 12 = 14$ **B.** $9x + 15 = 20$ **C.** $-6x - 18 = -21$ **D.** $-11x = 12x + 12$

4. The money a company received from sales of their product is represented by the equation $y = 45x - 120$, where y is the money in dollars and x is the number of products sold. How many products does the company need to sell in order to receive $3705?

F. 42   **G.** 85   **H.** 105   **I.** 166,605

5. Mrs. Decker walks for 30 minutes each day as often as possible. What is an equation that relates the number of days d that Mrs. Decker walks and the number of minutes m that she spends walking?

A. $m = 30d$ **B.** $d = 30m$ **C.** $d = m + 30$ **D.** $m = d + 30$

Short Response

6. There are 450 people travelling to watch a playoff football game. Each bus can seat up to 55 people. Write an equation that represents the number of buses it will take to transport the fans. Use a table to find a solution.