

Name: _____

Date: _____

Inverse operations: Questions

$$\begin{aligned}
 (1) \quad & \frac{x-3}{4} = 1 \\
 & \frac{x-3}{4} \times \dots = 1 \times \dots \\
 & x-3 = \dots \\
 & x-3 + \dots = \dots + \dots \\
 & x = \dots
 \end{aligned}$$

$$\begin{aligned}
 (6) \quad & 9x + 6 = 60 \\
 & 9x + 6 - \dots = 60 - \dots \\
 & 9x = \dots \\
 & \frac{9x}{\dots} = \frac{\dots}{\dots} \\
 & x = \dots
 \end{aligned}$$

$$\begin{aligned}
 (2) \quad & \frac{x+1}{5} = 1 \\
 & \frac{x+1}{5} \times \dots = 1 \times \dots \\
 & x+1 = \dots \\
 & x+1 - \dots = \dots - \dots \\
 & x = \dots
 \end{aligned}$$

$$\begin{aligned}
 (7) \quad & 6x + 1 = 13 \\
 & 6x + 1 - \dots = 13 - \dots \\
 & 6x = \dots \\
 & \frac{6x}{\dots} = \frac{\dots}{\dots} \\
 & x = \dots
 \end{aligned}$$

$$\begin{aligned}
 (3) \quad & \frac{x}{9} - 7 = -2 \\
 & \frac{x}{9} - 7 + \dots = -2 + \dots \\
 & \frac{x}{9} = \dots \\
 & \frac{x}{9} \times \dots = \dots \times \dots \\
 & x = \dots
 \end{aligned}$$

$$\begin{aligned}
 (8) \quad & 8(x+7) = 104 \\
 & \frac{8(x+7)}{\dots} = \frac{104}{\dots} \\
 & x+7 = \dots \\
 & x+7 - \dots = \dots - \dots \\
 & x = \dots
 \end{aligned}$$

$$\begin{aligned}
 (4) \quad & \frac{x}{6} - 7 = -5 \\
 & \frac{x}{6} - 7 + \dots = -5 + \dots \\
 & \frac{x}{6} = \dots \\
 & \frac{x}{6} \times \dots = \dots \times \dots \\
 & x = \dots
 \end{aligned}$$

$$\begin{aligned}
 (9) \quad & \frac{x}{8} - 3 = 0 \\
 & \frac{x}{8} - 3 + \dots = 0 + \dots \\
 & \frac{x}{8} = \dots \\
 & \frac{x}{8} \times \dots = \dots \times \dots \\
 & x = \dots
 \end{aligned}$$

$$\begin{aligned}
 (5) \quad & 3(x-6) = -12 \\
 & \frac{3(x-6)}{\dots} = \frac{-12}{\dots} \\
 & x-6 = \dots \\
 & x-6 + \dots = \dots + \dots \\
 & x = \dots
 \end{aligned}$$

$$\begin{aligned}
 (10) \quad & \frac{x-3}{4} = 4 \\
 & \frac{x-3}{4} \times \dots = 4 \times \dots \\
 & x-3 = \dots \\
 & x-3 + \dots = \dots + \dots \\
 & x = \dots
 \end{aligned}$$

Name: _____

Date: _____

Inverse operations: Answers

$$\begin{aligned}
 (1) \quad & \frac{x-3}{4} = 1 \\
 & \frac{x-3}{4} \times 4 = 1 \times 4 \\
 & x-3 = 4 \\
 & x-3+3 = 4+3 \\
 & x = 7
 \end{aligned}$$

$$\begin{aligned}
 (6) \quad & 9x+6 = 60 \\
 & 9x+6-6 = 60-6 \\
 & 9x = 54 \\
 & \frac{9x}{9} = \frac{54}{9} \\
 & x = 6
 \end{aligned}$$

$$\begin{aligned}
 (2) \quad & \frac{x+1}{5} = 1 \\
 & \frac{x+1}{5} \times 5 = 1 \times 5 \\
 & x+1 = 5 \\
 & x+1-1 = 5-1 \\
 & x = 4
 \end{aligned}$$

$$\begin{aligned}
 (7) \quad & 6x+1 = 13 \\
 & 6x+1-1 = 13-1 \\
 & 6x = 12 \\
 & \frac{6x}{6} = \frac{12}{6} \\
 & x = 2
 \end{aligned}$$

$$\begin{aligned}
 (3) \quad & \frac{x}{9} - 7 = -2 \\
 & \frac{x}{9} - 7 + 7 = -2 + 7 \\
 & \frac{x}{9} = 5 \\
 & \frac{x}{9} \times 9 = 5 \times 9 \\
 & x = 45
 \end{aligned}$$

$$\begin{aligned}
 (8) \quad & 8(x+7) = 104 \\
 & \frac{8(x+7)}{8} = \frac{104}{8} \\
 & x+7 = 13 \\
 & x+7-7 = 13-7 \\
 & x = 6
 \end{aligned}$$

$$\begin{aligned}
 (4) \quad & \frac{x}{6} - 7 = -5 \\
 & \frac{x}{6} - 7 + 7 = -5 + 7 \\
 & \frac{x}{6} = 2 \\
 & \frac{x}{6} \times 6 = 2 \times 6 \\
 & x = 12
 \end{aligned}$$

$$\begin{aligned}
 (9) \quad & \frac{x}{8} - 3 = 0 \\
 & \frac{x}{8} - 3 + 3 = 0 + 3 \\
 & \frac{x}{8} = 3 \\
 & \frac{x}{8} \times 8 = 3 \times 8 \\
 & x = 24
 \end{aligned}$$

$$\begin{aligned}
 (5) \quad & 3(x-6) = -12 \\
 & \frac{3(x-6)}{3} = \frac{-12}{3} \\
 & x-6 = -4 \\
 & x-6+6 = -4+6 \\
 & x = 2
 \end{aligned}$$

$$\begin{aligned}
 (10) \quad & \frac{x-3}{4} = 4 \\
 & \frac{x-3}{4} \times 4 = 4 \times 4 \\
 & x-3 = 16 \\
 & x-3+3 = 16+3 \\
 & x = 19
 \end{aligned}$$