

Name: Key

Date: \_\_\_\_\_



Solve the equations. Complete  $\bigcirc$ 's first,  $\square$ 's second, and  $\triangle$ 's last.

$$\begin{array}{r} (1) \quad -45 = 3(2x - 3) \\ -45 = 6x - 9 \\ +9 \quad +9 \\ \hline -36 = 6x \\ \frac{-36}{6} = \frac{6x}{6} \\ \boxed{-6 = x} \end{array}$$

$$\begin{array}{r} (2) \quad -3(3x - 4) = 57 \\ -9x + 12 = 57 \\ -12 \quad -12 \\ \hline -9x = 45 \\ \frac{-9x}{-9} = \frac{45}{-9} \\ \boxed{x = -5} \end{array}$$

$$\begin{array}{r} (3) \quad 17 = 7x - 2(3x - 4) \\ 17 = 7x - 6x + 8 \\ 17 = x + 8 \\ -8 \quad -8 \\ \hline \boxed{9 = x} \end{array}$$

$$\begin{array}{r} (4) \quad 14 - 2x = 3x - 6 \\ +2x \quad +2x \\ \hline 14 = 5x - 6 \\ +6 \quad +6 \\ \hline 20 = 5x \\ \frac{20}{5} = \frac{5x}{5} \\ \boxed{4 = x} \end{array}$$

$$\begin{array}{r} (5) \quad -10 + x = 8 - 2x \\ +2x \quad +2x \\ \hline -10 + 3x = 8 \\ +10 \quad +10 \\ \hline 3x = 18 \\ \frac{3x}{3} = \frac{18}{3} \\ \boxed{x = 6} \end{array}$$

$$\begin{array}{r} (6) \quad 4 - 3x = -2x - 3 \\ +3x \quad +3x \\ \hline 4 = x - 3 \\ +3 \quad +3 \\ \hline \boxed{7 = x} \end{array}$$

$$\begin{array}{r} (7) \quad (-6) = \left[ \frac{-5x - 2}{2} \right] 2 \\ -12 = -5x - 2 \\ +2 \quad +2 \\ \hline -10 = -5x \\ \frac{-10}{-5} = \frac{-5x}{-5} \\ \boxed{2 = x} \end{array}$$

$$\begin{array}{r} (8) \quad 3 \left[ \frac{4x - 2}{3} \right] = (6) 3 \\ 4x - 2 = 18 \\ +2 \quad +2 \\ \hline 4x = 20 \\ \frac{4x}{4} = \frac{20}{4} \\ \boxed{x = 5} \end{array}$$

$$\begin{array}{r} (9) \quad -2x + 3(x + 4) = 4 \\ -2x + 3x + 12 = 4 \\ x + 12 = 4 \\ -12 \quad -12 \\ \hline \boxed{x = -8} \end{array}$$

$$\begin{array}{r} (10) \quad 39 = -5x - 2(-6x - 2) \\ 39 = -5x + 12x + 4 \\ 39 = 7x + 4 \\ -4 \quad -4 \\ \hline 35 = 7x \\ \frac{35}{7} = \frac{7x}{7} \\ \boxed{x = 5} \end{array}$$