

$$1) 12y - 3y = \boxed{9y}$$

$$2) 5x + 2y - x = \boxed{4x + 2y}$$

$$3) -3(x-2) = \boxed{-3x + 6}$$

$$4) 2 - 5(x+1) = 2 - 5x - 5 \\ = \boxed{-3 - 5x}$$

$$5) x + 5 = -7 \\ -5 \quad -5 \\ \boxed{x = -12}$$

$$6) 4 = x - 10 \\ +10 \quad +10 \\ \boxed{14 = x}$$

$$7) 3x = -24 \\ \frac{3}{3} \quad \frac{3}{3} \\ \boxed{x = -8}$$

$$8) \frac{-12}{-2} = \frac{-2x}{-2} \\ \boxed{6 = x}$$

$$9) 3x - x = 7 - (-3)$$

$$2x = 7 + 3$$

$$\frac{2x}{2} = \frac{10}{2}$$

$$\boxed{x = 5}$$

$$10) 4x + 1 = -15 \\ -1 \quad -1$$

$$\frac{4x}{4} = \frac{-16}{4}$$

$$\boxed{x = -4}$$

$$11) 2x + 2 = 5x + 17 \\ -2 \quad -2$$

$$2x = 5x + 15 \\ -5x \quad -5x$$

$$\frac{-3x}{-3} = \frac{15}{-3}$$

$$\boxed{x = -5}$$

$$12) 4(x-1) + 10 = 3x + 4(-x-1)$$

$$4x - 4 + 10 = 3x - 4x - 4$$

$$\frac{4x + 6}{-6} = \frac{-x - 4}{-6}$$

$$\frac{4x}{+x} = \frac{-x - 10}{+x}$$

$$\frac{5x}{5} = \frac{-10}{5}$$

$$\boxed{x = -2}$$