

Solving Equations

Ex. 1 $\frac{2x+1}{3} + 10 = 15$ ← $\frac{x}{x2}$ ↑
 $+1$
 $\div 3$
 $+10$

$\cancel{3} \cdot \frac{2x+1}{\cancel{3}} = 5 \cdot 3$

$2x+1 = 15$

$\frac{2x}{2} = \frac{14}{2}$

$x = 7$

Ex. 2. $5(3k+4) - 7 = 58$

$\frac{5(3k+4)}{5} = \frac{65}{5}$

$3k+4 = 13$

$\frac{3k}{3} = \frac{9}{3}$

$k = 3$

Ex. 3 $3(x-2) + 4(x+1) = 6(x+2)$

$3x - 6 + 4x + 4 = 6x + 12$

$7x - 2 = 6x + 12$

$x - 2 = 12$

$x = 14$

$$\{x 4 \quad \frac{6}{1} \left(\frac{2x}{3} + \frac{1}{2}(x+1) = 4 \right)$$

$$\frac{12x}{3} + \frac{6}{2}(x+1) = 24$$

$$4x + 3(x+1) = 24$$

$$4x + 3x + 3 = 24$$

$$7x + 3 = 24$$

$$\frac{7x}{7} = \frac{21}{7}$$

$$x = 3$$

$$\{x 5 \quad \frac{2n-8}{5} + \frac{n}{3} = n-4$$

$$3 \left(\frac{2n-8}{5} \right) + 15 \frac{n}{3} = 15(n-4)$$

$$3(2n-8) + 5n = 15n-60$$

$$6n-24 + 5n = 15n-60$$

$$11n-24 = 15n-60$$

$$-4n-24 = -60$$

$$\frac{-4n}{-4} = \frac{-36}{-4}$$

$$n = 9$$