

1.
$$\frac{5}{x} = \frac{7}{x-4}$$

2.
$$\frac{x-3}{5} = \frac{x+5}{15}$$

3.
$$\frac{x-1}{7} = \frac{2x-2}{3x-1}$$

4.
$$\frac{x+3}{x+1} = \frac{15}{x+7}$$

5.
$$\frac{3}{x} = \frac{2}{5-x}$$

6.
$$\frac{x+2}{x-2} = \frac{2x+4}{x+1}$$

7. Simplify:

$$\frac{x^2 + x - 6}{x^2 + 8x + 15}$$

8. Simplify:

$$\frac{3x^2 + 5x - 2}{7x^2 + 12x - 4}$$

9. Factor:

$$k^2 - 8k + 12$$

10. Factor and Solve:

$$3x^2 - 16x - 7 = 5$$

11. Solve:

$$-12 = 2 + 5v + 2v$$

12. Solve:

$$-16 + 5n = -7(-6 + 8n) + 3$$