

Seman 6

$$1) \frac{2x + 8}{x^2 - 16} =$$

$$\frac{2x + 8}{x^2 - 16} =$$

$$\frac{2}{x-4}$$

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$$2) \frac{3a + 7a + 13}{5-a} =$$

$$\frac{3a + 7a + 13}{5-a} = (3+7)a = 10a$$

$$\frac{10a + 13}{5-a}$$

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$$3) \frac{3}{x+3} - \frac{10}{x^2+7x+12} =$$

$$\frac{3}{x-3} - \frac{10}{x^2+4x+3} = \frac{3}{x+3} - \frac{10}{x(x+4)+3(x+4)}$$

$$\frac{3}{x+3} - \frac{10}{(x+4)x(x+3)} = \frac{3(x+4)-10}{(x+4)x(x+3)} =$$

$$\frac{3x+12-10}{(x+4)x(x+3)} = \frac{3x+2-10}{x^2+3x+4x+12}$$

$$\frac{3x-8}{x^2+3x+4x+12} = \frac{3x-8}{x^2+7x+12}$$

$$4) \frac{6x}{x^2-7x+10} - \frac{1}{x-5} = \frac{6x}{x^2-2x-5x+10} - \frac{1}{x-5}$$

$$\frac{6x}{x(x-2)-5x+10} - \frac{1}{x-5} = \frac{6x}{x(x-2)-5(x-2)} - \frac{1}{x-5}$$

$$\frac{6x}{(x-2)x(x-5)} - \frac{1}{x-5} = \frac{6x-(x-2)}{(x-2)x(x-5)} = \frac{6x-x+2}{(x-2)x(x-5)}$$

$$\frac{6x-x+2}{x^2-5x-2x+10} = \frac{5x+2}{x^2-5x-2x+10} = \frac{5x+2}{x^2-7x+10}$$

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$$5) \frac{3x+5}{8} - \frac{5x-3}{10} = \frac{5(3x+5)-4(5x-3)}{40}$$

$$\frac{15x+25-4(5x-3)}{40} = \frac{15x+25-20x+12}{40}$$

✓

$$\frac{-5x+37}{40}$$

$$\frac{-5x+37}{40}$$

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