2.4 Answers

2.4.1 Solutions (2.3 Exercise)

Answer 1

$$\frac{x+1}{(x+3)^2} = \frac{1}{(x+3)} - \frac{2}{(x+3)^2}$$

Answer 2

$$\frac{2x^2-5x+7}{(x-2)(x-1)^2} = \frac{5}{x-2} - \frac{3}{x-1} - \frac{4}{(x-1)^2}$$

Answer 3

$$\frac{x^2-20x-11}{(x+1)^2(x-4)} = \frac{4}{x+1} - \frac{2}{(x+1)^2} - \frac{3}{x-4}$$

Answer 4

$$\frac{9x^2}{(x-1)^2(2x+1)} = \frac{4}{(x-1)} + \frac{3}{(x-1)^2} + \frac{1}{(2x+1)}$$

Answer 5

$$\frac{2x^2+9x+2}{(x+5)^3} = \frac{2}{x+5} - \frac{11}{(x+5)^2} + \frac{7}{(x+5)^3}$$

Answer 6

$$\frac{8}{(x+1)} + \frac{3}{(x+1)^2} + \frac{5}{(x+1)^3} = \frac{8x^2+19x+16}{(x+1)^3}$$

Answer 7

$$\frac{8(9x-10)}{x^2(x+4)^2} = \frac{7}{x} - \frac{5}{x^2} - \frac{7}{x+4} - \frac{23}{(x+4)^2}$$

Answer 8

$$\frac{17}{18} = \frac{1}{2} + \frac{1}{3} + \frac{1}{9}$$