denominator with only 'linear factors'

decompose the following expressions:

1.
$$\frac{x-1}{(x+5)(x+7)}$$

2.
$$\frac{x-5}{(x-3)(x-1)}$$

3.
$$\frac{x+4}{(x+2)(x+3)}$$

4.
$$\frac{x+1}{(x+2)(x-1)}$$

5.
$$\frac{3x+1}{(x-2)(x-4)}$$

6.
$$\frac{2x-2}{(3x+1)(x-3)}$$

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

8.
$$\frac{5x-3}{(3-x)(2x-2)}$$

9.
$$\frac{4x-1}{(5-2x)(2-7x)}$$

10.
$$\frac{5-3x}{(3-2x)(2-5x)}$$

denominator with only 'linear factors'

answers:

1.
$$\frac{4}{x+7} - \frac{3}{x+5}$$

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

3.
$$\frac{1}{x+2} - \frac{1}{x+3}$$

4.
$$\frac{1}{3(x+2)} + \frac{2}{3(x-1)}$$

5.
$$\frac{13}{2(x-4)} - \frac{7}{2(x-2)}$$

6.
$$\frac{4}{5(3x+1)} + \frac{2}{5(x-3)}$$

7.
$$\frac{7}{4(2x+1)} + \frac{1}{4(2x-3)}$$

8.
$$\frac{1}{2(x-1)} - \frac{3}{x-3}$$

9.
$$\frac{18}{31(2x-5)} - \frac{1}{31(7x-2)}$$

10.
$$\frac{1}{11(2x-3)} - \frac{19}{11(5x-2)}$$