Find this sum:

$$\frac{2}{2}\cdot\frac{7}{18}+\frac{11}{12}\cdot\frac{3}{3}=\frac{14}{36}+\frac{33}{36}=\boxed{\frac{47}{36}}$$

Find this sum:

$$\frac{x-4}{x-4}\cdot\frac{5}{x+3}+\frac{2}{x-4}\cdot\frac{x+3}{x+3}$$

$$\frac{5x-20+2x+6}{(x-4)(x+3)}=\boxed{\frac{7x-14}{(x-4)(x+3)}}$$

Find this sum:

$$\frac{6}{x^2-25}+\frac{7}{x^2-6x+5}$$

$$\frac{(x-1)}{(x-1)}\frac{6}{(x+5)(x-5)}+\frac{7}{(x-5)(x-1)}\frac{(x+5)}{(x+5)}=\frac{6x-6+7x+35}{(x-5)(x-1)(x+5)}$$

$$\boxed{\frac{13x+29}{(x-5)(x-1)(x+5)}}$$

Find this difference:

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

$$\frac{(x-2)}{(x-2)}\cdot\frac{5}{2x(x+2)}-\frac{3}{(x+2)(x-2)}\cdot\frac{2x}{2x}=\frac{5x-10-6x}{2x(x+2)(x-2)}$$

$$\boxed{\frac{-x-10}{2x(x+2)(x-2)}}$$

Find this sum:

$$\frac{3}{x^2+5x+6}+\frac{2x}{x^2+8x+15}$$

$$\frac{(x+5)\ 3}{(x+5)(x+3)(x+2)}+\frac{2x\ (x+2)}{(x+3)(x+5)(x+2)}$$

$$3x+15+2x^2+4x=\frac{2x^2+7x+15}{(x+5)(x+3)(x+2)}$$