$$\frac{4 e}{e^2 - 9} + \frac{e + 5}{2 e - 6}$$

$$\frac{e^2 - 9 e + 15}{e^2 - 9}$$

$$\frac{e^2 + 8 e + 5}{e^2 - 9}$$

أجد ناتج ما يأتي واكتبه في أبسط صورة: 2٠

$$\frac{e^2 + 16 e + 15}{2 e^2 - 18}$$

$$e^2 + 8 e + 5$$

الحل:

 $2 e^{2} - 18$

 $\frac{4e}{e^2-9} + \frac{e+5}{2e-6} = \frac{4e}{(e-3)(e+3)} + \frac{e+5}{2(e-3)}$

$$= \frac{2(4 \text{ e})}{2(\text{e}-3)(\text{e}+3)} + \frac{(\text{e}+5)(\text{e}+3)}{2(\text{e}-3)(\text{e}+3)}$$

$$= \frac{2}{2(e^{-\frac{2}{2}})}$$
$$= \frac{2}{2(e^{-\frac{2}{2}})}$$

$$= \frac{8 e}{2 (e-3) (e+3)} + \frac{e^2 + 8 e + 15}{2 (e-3) (e+3)}$$

$$= \frac{8 e + e^2 + 8 e + 15}{2 (e - 3) (e + 3)}$$

$$= \frac{2(e-3)(e+3)}{2(e+3)}$$

$$= \frac{e^2 + 16 e + 15}{2 e^2 - 18}$$