

Di Factorisasi

Factoriser:

$$\begin{aligned} \textcircled{1} & (7x-1)^2 - (1-x)^2 \\ &= (7x-1 + (1-x))(7x-1 - (1-x)) \\ &= (7x-1 + 1-x)(7x-1 - 1+x) \\ &= (6x)(8x-2) \\ &= \boxed{6x(8x-2)} \end{aligned}$$

$$\begin{aligned} \textcircled{2} & 3(1-2x) - (1-2x)^2 \\ &= (1-2x)(3 - (1-2x)) \\ &= (1-2x)(3 - 1 + 2x) \\ &= \boxed{(1-2x)(2x+2)} \end{aligned}$$

$$\begin{aligned} \textcircled{3} & 5x(3-x)^2 + (3-x) \\ &= (3-x)(5x(3-x) + 1) \\ &= (3-x)(15x - 5x^2 + 1) \\ &= \boxed{(3-x)(-5x^2 + 15x + 1)} \end{aligned}$$

$$\begin{aligned} \textcircled{4} & 49x^2 - (1+x)^2 \\ &= (7x)^2 - (1+x)^2 \\ &= (7x + 1 + x)(7x - (1+x)) \\ &= (8x+1)(7x-1-x) \\ &= \boxed{(8x+1)(6x-1)} \end{aligned}$$