

$$f) \quad a) \quad f(x) = \frac{2}{5-x} = \frac{2}{5} \sum_{n=0}^{\infty} \frac{1}{5^n} x^n$$

$$b) \quad g(x) = \frac{7}{2x-3} = -\frac{7}{3} \sum_{n=0}^{\infty} \left(\frac{2x}{3}\right)^n = -\frac{7}{3} \sum_{n=0}^{\infty} \left(\frac{2}{3}\right)^n x^n$$

$$c) \quad h(x) = \frac{3}{x+2} = \frac{3}{2} \sum_{n=0}^{\infty} \left(-\frac{1}{2}\right)^n x^n$$

$$b) g(x) = \frac{7}{2x-3} = -\frac{7}{3} \sum_{n=0}^{\infty} \left(\frac{2x}{3}\right)^n = -\frac{7}{3} \sum_{n=0}^{\infty} \left(\frac{2}{3}\right)^n x^n$$

$$y' = \frac{7x}{2x-3} = 7x \cdot \frac{1}{2x-3} = -\frac{7}{3} \sum_{n=0}^{\infty} \left(\frac{2}{3}\right)^n x^{n+1}$$

$$\textcircled{4} \ h(x) = \frac{2}{5-x} = 2 \frac{1}{5-x+3-3} = \boxed{} \frac{1}{1-\boxed{}(x-3)}$$

centered @ 3

Goal