

HW 43

$$\textcircled{1} \quad \frac{3(x+h)-7-3x+7}{h}$$

$$\frac{3x+3h-7-3x+7}{h}$$

$$\frac{3h}{h}$$

$$\boxed{3}$$

$$\textcircled{2} \quad \frac{3}{5(x+h)+6} - \frac{3}{5x+6} \cdot \frac{(5x+6)(5x+5h+6)}{(5x+6)(5x+5h+6)}$$

$$\frac{3(5x+6) - 3(5x+5h+6)}{h(5x+6)(5x+5h+6)}$$

$$\frac{15x+18-15x-15h-18}{h(5x+6)(5x+5h+6)}$$

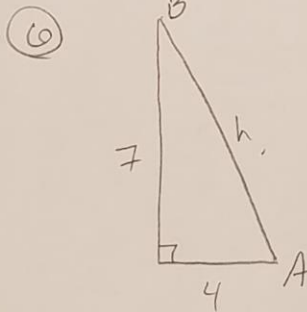
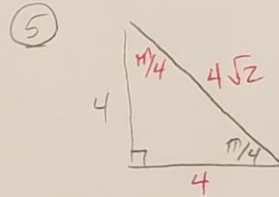
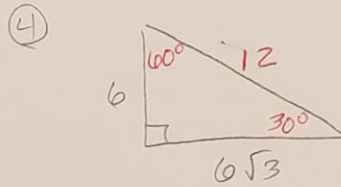
$$\boxed{\frac{-15}{(5x+6)(5x+5h+6)}}$$

$$\textcircled{3} \quad \frac{2}{(x+h)^2} - \frac{2}{x^2} \cdot \frac{(x+h)^2 \cdot x^2}{(x+h)^2 \cdot x^2}$$

$$\frac{2x^2 - 2(x+h)^2}{hx^2(x+h)^2}$$

$$\frac{2x^2 - 2x^2 - 4xh - 2h^2}{hx^2(x+h)^2}$$

$$\boxed{\frac{-4x-2h}{x^2(x+h)^2}}$$



$$4^2 + 7^2 = h^2$$

$$\boxed{\sqrt{65} = h}$$

$$\tan A = \frac{7}{4}$$

$$A = \tan^{-1}\left(\frac{7}{4}\right)$$

$$\boxed{A = 60.2551^\circ}$$

$$B = 90 - A = \boxed{29.7448^\circ}$$