

Attendance check-in #5

Markay

Exercise 1.

$$a) \quad 400x - \frac{x^2}{20} \rightarrow \frac{d}{dx} [400x] - \frac{d}{dx} \left[\frac{x^2}{20} \right] \rightarrow 400 - \frac{1}{20}(2x)$$

$$\rightarrow 400 - \frac{2x}{20} \rightarrow \boxed{400 - \frac{x}{10}}$$

Exercise 2.

$$a) \quad x = 4000 - 40p \rightarrow -40p = x - 4000 \rightarrow \boxed{-\frac{x}{40} + 100}$$

$$b) \quad -\frac{16000}{40} + 100 \rightarrow -400 + 100 = \boxed{-300}$$

Exercise 3.

$$a) \quad 10,000 + 150x - 0.2x^2$$

$$\downarrow$$

$$10,000 + 150(120) - 0.2(120)^2$$

$$\downarrow$$

$$\boxed{25,120}$$