

Textbook #1

P. 230

$$\# 5 \quad f(x) = -0.375x^2 + 3x \quad \text{or} \quad f(x) = -\frac{3}{8}(x-4)^2 + 6$$

P. 231

#8

$$\text{a) } f(x) = -\frac{1}{84}x^2 + \frac{12}{7}x \quad \text{or} \quad f(x) = -\frac{1}{84}(x-72)^2 + \frac{432}{7}$$

$$\text{b) } \max = \frac{432}{7} \approx 61.7$$

#9

$$\text{a) } \text{distance} = 8\text{m}$$

$$\text{b) } \text{Orange Display} \quad f(x) = -0.19x^2 + 5.32x - 18.24$$

$$\text{Green Display} \quad f(x) = -0.19x^2 + 3.04x$$