

Chapter 1 Project Answers

1. (a) $(0, 40)$: Because $(x, p) = (0, 40)$, no units are sold at a price of \$40.

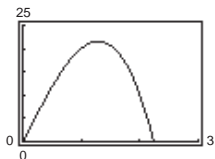
(b) $(\sqrt{8}, 0)$: Because $(x, p) = (\sqrt{8}, 0)$, no more than $\sqrt{8}$ units are “given away” at a price of \$0.

2. Maximum revenue: \$43.546484 million at $x = 1.632993$

$$p = 40 - 5(1.632993)^2 \approx \$26.67$$

Yes, yes.

3.



1.29 million units for a profit of \$21.52 per unit