8-106. See below:

    a. $y = (x + 3)^2 + 6, (-3, 6)$

    b. $y = (x - 2)^2 + 5, (2, 5)$

    c. $y = (x + 4)^2 - 16, (-4, -16)$

    d. $y = (x + 2.5)^2 - 8.25, (-2.5, -8.25)$
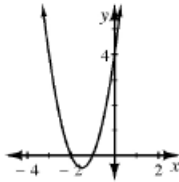
8-107. See below:

    a. $(4, -\frac{1}{2})$

    b. $(-2, -3)$

    c. $(0, \frac{5}{2})$

    d. $(0, -4)$

8-108. $\approx 1.088, 8.8\%$ monthly increase

8-109. x–intercepts: $(-1, 0)$ and $(-2, 0)$, y-intercept: $(0, 4)$, solution graph shown below.

8-110. See below:

    a. $m = \frac{3}{4}, b = \frac{29}{4}$

    b. Yes, it makes the equation a true statement.