## SM3 3.5 odd answers

1. 
$$x = -5.2$$

3. 
$$x = \pm 6$$

5. 
$$x = -\frac{4}{3}$$
, 3

7. 
$$x = \frac{2}{5}, -1$$

9. 
$$x = 5.3$$

- 11a. time in seconds the rocket is in the air
- 11b. height of the rocket in feet at any given time
- 11c. initial or starting velocity
- 11d. initial or starting height
- 11e. 0 ft.
- 11f. 12 feet per second
- 11g. substitute for  $h_0$
- 11h. substitute for  $v_0$

11i. 
$$h(t) = -16t^2 + 120t$$

11k. 
$$0 = -16t^2 + 120t$$

11l. 
$$t = 7.5$$
 seconds

- 11m. The rocket lands on the ground after being in the air for 7.5 seconds.
- 13a. number of jerseys

13b. 
$$x^2 + 33x + 25 = 455$$

- 13c. factor
- 13d. x = -43,10 can't use -43 because you can't buy a negative number of jerseys
- 13e. The seniors bought 10 jerseys for \$455.