

1-32. See below.

- a. $x = \frac{9}{24} = \frac{3}{8} = 0.375$
- b. no solution
- c. $x \approx 6.44$
- d. $x = 0.5$

1-33. See below.

- a. Yes, his plants will be dead. If his plants are indoors, they will be dead because he will be gone for 2 weeks and so he did not water them at least once a week. If he left them outdoors, they will still be dead because it has not rained for 2 weeks, so he needed to water them once a week as well.

1-34. See below.

- a. $y = \frac{2}{3}x - 4$
- b. $y = -\frac{5}{2}x + \frac{7}{2}$

1-35. See below.

- a. $6x + 6$
- b. $6x + 6 = 78$, so $x = 12$ and the rectangle is 15 cm by 24 cm.
- c. $(2 \cdot 12)(12 + 3) = 360$

1-36. See below.

- a. $-\frac{3}{5}$
- b. $\frac{6}{3} = \frac{2}{1} = 2$
- c. $-\frac{3}{6} = -\frac{1}{2}$
- d. $\frac{0}{7} = 0$