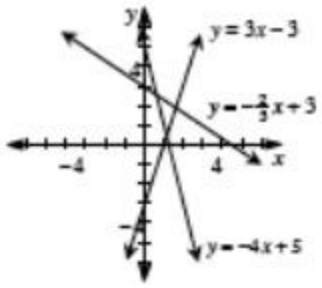
1-54. See solution below.



1-55. See below.

a. $\frac{27}{48} \approx 56.3\%$

b. $\frac{10}{130} = \frac{1}{13} \approx 8\%$

c. 0

d. $\frac{5}{9} \approx 56\%$

1-56. $5x - 2 + 2x + 6 = 67$, $x = 9$, so $5(9) - 2 = 43$ miles

1-57. See below.

a. $x = 3.75$

b. $x = 3$

c. $x = 0$

d. $x = 3$

e. $x \approx 372.25$

f. $x = -3.4$

1-58. The flag would need to be a rectangle. The height of the cylinder would match the height of the rectangle along the pole, and the cylinder's radius would match the width of the rectangle.