

6-23. See below.

- a. Not similar because there are not three pairs of corresponding angles that are congruent.
- b. Similar (AA \sim).

6-24. See below.

a. $y = \frac{5}{2}x - 8$

b. $y = \frac{3}{2}x + 1$

6-25. See below.

b. $\frac{14}{22} = \frac{10}{DE}$, $DE \approx 15.71$

6-26. See below.

- a. Yes because of $AAS \cong$ or $ASA \cong$; $\triangle DEF \cong \triangle LJK$.
- b. One possible answer, a reflection across line segment JK and then a translation of $\triangle DEF$ to line up point J and point E , followed by a rotation.
- c. $KL \approx 4.3$ units

6-27. $c = 10$ by substitution.

6-28. See below.

a. $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B) = \frac{64}{212} + \frac{112}{212} - 0 = \frac{176}{212} \approx 83.0\%$; the probability of A and B (the overlap) was 0.

b. $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B) \rightarrow 75\% = \frac{114}{212} + \frac{56}{212} - x \rightarrow x \approx 5.1\%$