

# Geometry 8.5 (updated. 9/30/14)

1.  $\frac{d}{7}$
2.  $\frac{L}{e}$
3.  $\frac{d}{e}$
4.  $\frac{a}{e}$
5.  $\frac{a}{e}$
6.  $\frac{L}{e}$
7. D, D
8. equal, complement
9. reciprocals
10. 0.4067
11. 0.7071
12. 28.6363
13. 0.6820
14.  $\sin A = \frac{4}{5}, \cos A = \frac{3}{5}, \tan A = \frac{4}{3}$
15.  $\sin A = \frac{\sqrt{2}}{2}, \cos A = \frac{\sqrt{2}}{2}, \tan A = 1$
16.  $\sin A = \frac{1}{3}, \cos A = \frac{2\sqrt{2}}{3}, \tan A = \frac{\sqrt{2}}{4}$
17.  $x = 9.37, y = 12.72$
18.  $x = 14.12, y = 19.42$
19.  $x = 20.84, y = 22.32$
20.  $x = 19.32, y = 5.18$
21.  $x = 5.85, y = 12.46$
22.  $x = 20.89, y = 13.43$
23.  $x = 435.86 \text{ ft.}$
24.  $x = 56 \text{ m}$
25. 25.3 ft
26. 42.9 ft
27. 94.6 ft
28. 49 ft
29. 14 miles
30. The hypotenuse is the longest side in a right triangle. Since the sine and cosine ratios are each a leg divided by the hypotenuse, the denominator is always going to be greater than the numerator. This ensures a ratio that is less than 1.