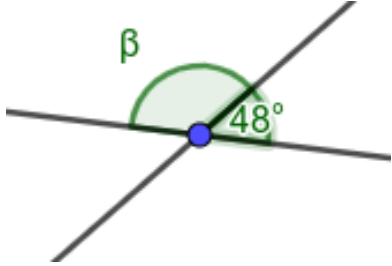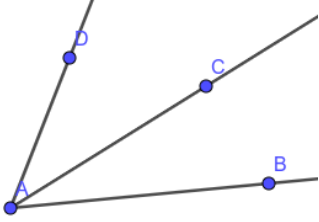# Geometry Review Test 1

1. Do all problems from Algebra Test 1 Review.

2. Illustrate each of the following by labeling two points P and Q and drawing the picture:

   (a) R_{PQ}

   (b) R_{QP}

   (c) $\overline{PQ}$

   (d) L_{PQ}

3. If A, B, and C are points that all lie on the same line:

   (a) Draw a picture of the situation.

   (b) Write an equation relating $d(A, B)$, $d(B, C)$ and $d(A, C)$.

4. Draw an example of 3 **distinct** points in the plane that do not determine a triangle.

5. Construct a triangle whose sides are length 3 cm, 4 cm, and 5 cm. What are the angles of that triangle.

6. Construct a triangle whose sides are length 2 cm, 2 cm, and 3.5 cm. What are the angles of that triangle.

7. From DeLand, you have to drive 241 miles to get to Tallahassee. It is 400 miles from Tallahassee to Charleston South Carolina. From this we know that the trip from DeLand FL to Charleston South Carolina must be less than or equal to what?

8. Let X, Y, and Z be points, and let Z lie on the segment $\overline{XY}$.

   (a) Draw a picture of the situation.

   (b) If $d(X, Y) = 5$ and $d(Y, Z) = 3$, what is $d(X, Z)$?

9. Let X, Y, and Z be points, and let Z lie on the line L_{XY}, but not on the segment $\overline{XY}$.

   (a) Draw a picture of the situation.

   (b) If $d(X, Y) = 5$ and $d(Y, Z) = 3$, what is $d(X, Z)$?

10. There are 360° longitude on the earth. How long is one degree if the circumference of the earth is 24,000 mile?

11. Use google to find the latitude of Orlando FL. Use this to figure out how far Orlando FL is from the North Pole.

12. Use a protractor to draw an angle of the following measurement:

    (a) 45°

    (b) 90°

    (c) 135°

    (d) 195°

    (e) 270°

    (f) 180°

13. If $\angle ABC$ and $\angle ABD$ are supplementary angles, and $m\angle ABC = 60^o$, find $m\angle ABD$.

14. If $\angle ABC$ and $\angle ABD$ are complementary angles, and $m\angle ABC = 60^o$, find $m\angle ABD$.

15. Solve for β using the Figure below:

16. Given the image below, and $m\angle BAC = 21^o$ and $m\angle BAD = 73^o$ find $m\angle CAD$.

17. What is the difference between $m\angle ABC$ and $\angle ABC$?