CMIC 2 – Unit 3 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Types of Triangles

Recall that triangles can be classified by their sides or their angles. Match the name of the type of triangle to the appropriate description, and then draw each triangle with the correct markings.

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| **Type of Triangle** | **Description** | **Drawing** |
| Right Triangle | A triangle with all different side lengths. |  |
| Equilateral Triangle | A triangle with two sides of the same length. |  |
| Isosceles Triangle | A triangle with one right (90o) angle. |  |
| Scalene Triangle | A triangle with all three sides of the same length. |  |

Now that you remember the different types of triangles, you can use coordinate geometry to classify what type is formed by any 3 given points. Coordinate geometry involves placing geometric figures in a coordinate plane. In order to determine what type of triangle is formed by 3 points, you need to use the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as well as remember that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ lines have slopes that are opposite (negative) reciprocals.

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| **Distance Formula** |  | **Slope** |
| $$d=\sqrt{(x\_{2}-x\_{1})^{2}+(y\_{2}-y\_{1})^{2}}$$ |  | $$\frac{change in y}{change in x}=\frac{rise}{run}=slope$$ |