## Properties of Geometry

1. In Figure 1 below, identify the angle complementary to $\angle D C E$ and find the measure of the angle.

Figure 1

2. In Figure 1 below, identify the angle supplementary to $\angle D C E$ and find the measure of the angle.

Figure 1

3. Pair the given examples of angles to represent either complementary or supplementary angles. Write a statement to compare and contrast complementary and supplementary angles.


| Complementary Angles | Supplementary Angles |
| :---: | :---: |
|  |  |

Compare and contrast complementary and supplementary angles.

## Properties of Geometry

4. Complete the table below to classify the different types of triangles according to their properties.

Place an " $X$ " in each cell for the property that fits the given types of triangles.

|  | Scalene <br> Triangle | Isosceles <br> Triangle | Equilateral <br> Triangle | Right <br> Triangle | Obtuse <br> Triangle | Acute <br> Triangle |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Polygon |  |  |  |  |  |  |
| Sum of interior angles <br> $=180^{\circ}$ |  |  |  |  |  |  |
| 3 sides |  |  |  |  |  |  |
| All sides congruent |  |  |  |  |  |  |
| At least two sides <br> congruent |  |  |  |  |  |  |
| No sides congruent |  |  |  |  |  |  |
| All angles congruent |  |  |  |  |  |  |
| Exactly 1 right angle |  |  |  |  |  |  |
| Exactly 1 obtuse <br> angle |  |  |  |  |  |  |
| All angles acute |  |  |  |  |  |  |

5. Using the information in the table above, how would you describe a scalene right triangle?
6. Using the information in the table above, how would you describe an isosceles right triangle?
7. Using the information in the table above, how would you describe an isosceles obtuse triangle?

## Properties of Geometry

8. Complete the table below to classify the different types of quadrilaterals according to their properties. Place an " $X$ " in each cell for the property that fits the given types of quadrilaterals.

|  | Parallelogram | Rhombus | Rectangle | Square | Trapezoid |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Polygon |  |  |  |  |  |
| Sum of <br> interior angles <br> $=360^{\circ}$ |  |  |  |  |  |
| 4 sides |  |  |  |  |  |
| Opposite <br> sides <br> congruent |  |  |  |  |  |
| All sides <br> congruent |  |  |  |  |  |
| Opposite <br> sides parallel |  |  |  |  |  |
| Only two <br> sides parallel |  |  |  |  |  |
| All angles <br> right angles |  |  |  |  |  |

9. Using the information in the table above, how would you describe a parallelogram?
10. Using the information in the table above, how would you describe a rhombus?
11. Using the information in the table above, how would you describe a square?
