**Fill in the blanks.**

1. A triangle has a total of \_\_\_\_\_\_\_\_\_\_\_ degrees.
2. The acute angles in a right triangle have a total of \_\_\_\_\_\_\_\_\_\_\_ degrees.
3. Congruent figures have all corresponding \_\_\_\_\_\_\_\_\_\_\_ and all corresponding \_\_\_\_\_\_\_\_\_\_\_ congruent.
4. If two angles of one triangle are congruent to two angles of another triangle, then the \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ are congruent.
5. Scalene triangles have \_\_\_\_\_\_\_\_\_\_\_ sides congruent.
6. Equilateral triangles have all \_\_\_\_\_\_\_\_\_\_\_ congruent.

**Match each diagram to the appropriate equation.**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | |  |
|  | |  | |

|  |  |  |
| --- | --- | --- |
| 1. **\_\_\_\_\_** | 1. **\_\_\_\_\_** | 1. **\_\_\_\_\_** |
| 1. **\_\_\_\_\_**     *U*  *A*    *V*      *B*  *T*  *C* | |  |
| 1. **\_\_\_\_\_**     *A*    *V*      *T*  *C*  *B* | |  |

|  |  |
| --- | --- |
| 1. **Find *x* then classify the triangle by its angles.** | 1. **Find the measure of the exterior angle.** |
|  |  |
| 1. **Find the measure of the exterior angle.** | 1. **Find the measure of .** |

|  |  |
| --- | --- |
| 1. **Find the value of *x* and *y.***   ***ABCDEFGHIJ*** | 1. **Find the value of *x*** |

1. **Finding Angles** Find the measure of each angle in a right triangle, where the measure of acute angle *A* is four times the measure of acute angle *C*.

**Diagram: Equation:**