

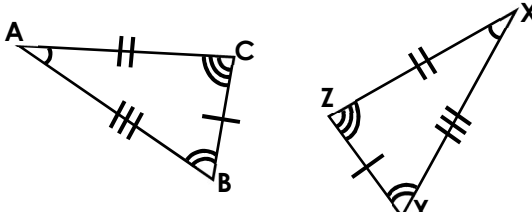
Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Triangle Congruence

#### Congruent Triangles

- Congruent triangles have \_\_\_\_\_ and \_\_\_\_\_.
- The parts of congruent triangles that “match” are called \_\_\_\_\_.

**In a congruence statement, \_\_\_\_\_ !!!!**



\_\_\_\_\_  $\cong$  \_\_\_\_\_

**CPCTC:** \_\_\_\_\_

\_\_\_\_\_  $\cong$  \_\_\_\_\_      \_\_\_\_\_  $\cong$  \_\_\_\_\_      \_\_\_\_\_  $\cong$  \_\_\_\_\_

\_\_\_\_\_  $\cong$  \_\_\_\_\_      \_\_\_\_\_  $\cong$  \_\_\_\_\_      \_\_\_\_\_  $\cong$  \_\_\_\_\_

**Examples:** Complete each congruence statement.

1.  $\triangle BCA \cong \triangle$  \_\_\_\_\_

2.  $\triangle$  \_\_\_\_\_  $\cong \triangle JKN$

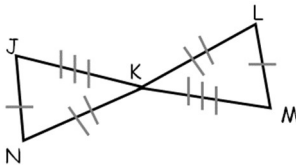
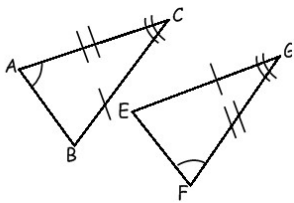
3. If  $\triangle ABC \cong \triangle DEF$ ,

4. If  $\triangle CAT \cong \triangle DOG$ ,

$\triangle$  \_\_\_\_\_  $\cong \triangle GFE$

then  $\angle C \cong$  \_\_\_\_\_

then  $AC \cong$  \_\_\_\_\_



5. If  $\triangle EPR \cong \triangle SAT$ ,  $m\angle R = 82$ ,  $m\angle S = 50$ , &  $m\angle A = 5x - 7$ , then  $x =$  \_\_\_\_\_ .

6. If  $\triangle GEO \cong \triangle FUN$ ,  $m\angle E = 3x - 4$ ,  $m\angle F = 2x$ , &  $m\angle N = 20 - x$ , then  $x =$  \_\_\_\_\_ .