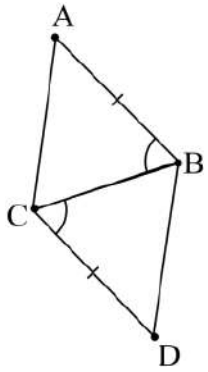
Name:_____ _____ Date:_____

1-3 More Triangle Congruency

Some Examples…

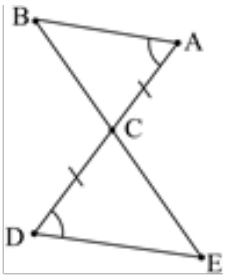
Ex 1. Given the diagram below are ΔABC and ΔDCB congruent?



State the information that can be derived from the diagram.

State if they are congruent and the postulate that supports it.

Ex 2. Given the diagram below are ΔABC and ΔDCE congruent?



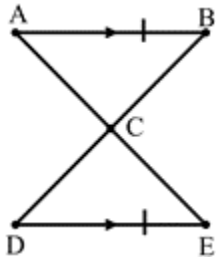
State the information that can be derived from the diagram.

State if they are congruent and the postulate that supports it.

Reminder: Alternate interior angles are congruent.

DIY Section:

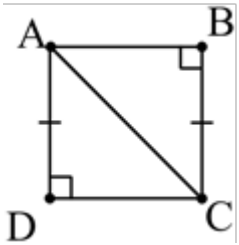
1) Given the diagram below are ΔABC and ΔEDC congruent?



State the information that can be derived from the diagram.

State if they are congruent and the postulate that supports it.

2) Given the diagram below are ΔABC and ΔADC congruent?

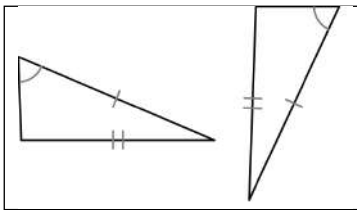


State the information that can be derived from the diagram.

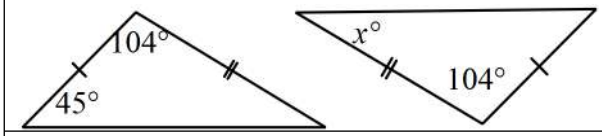
State if they are congruent and the postulate that supports it.

3) Are the triangles congruent? Explain.

4) State what additional informaton is required in order to

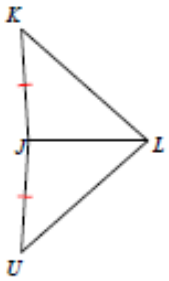


5a) What is the value of x? b) What postulate is used to prove your answer?

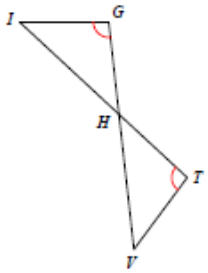


know that the triangles are congruent for the reason given.

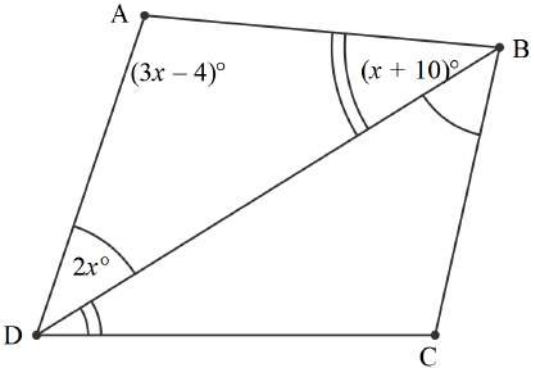
a) SSS



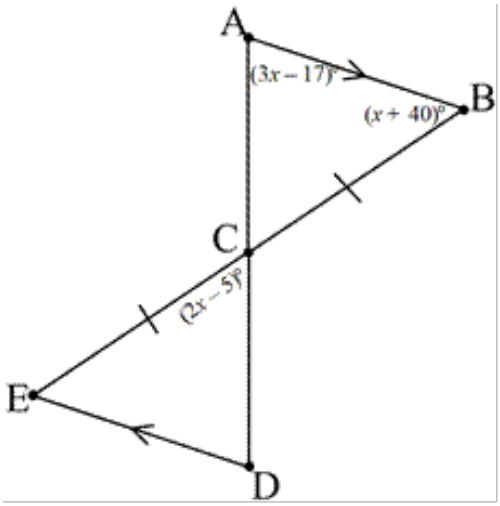
b) ASA



6 a) What postulate proves the two triangles are congruent?



b) Find the measure of ∠C.



7a) Which TWO triangle congruency postulates could be used to prove the two triangles are congruent?

b) Find the measure of $\angle E$.

Algebra Practice

8) Solve the equation for the volume of a cone for the radius and list the properties used.

$$V = \frac{1}{3}\pi r^2 h$$

9) Solve for r and list the properties used.

$$4(-1 + 3r) + 8(8r + 1) = -72$$

10) Solve for k and list the properties used.

$$-3k - 2k = -3(k + 2) + 2(k + 3)$$

11) Solve the kinetic energy equation for velocity and list the properties used.

$$K = \frac{1}{2}mv^2$$

12) Solve for n and list the properties used. $2(1-2n)+3=-3(n-1)$	13) Solve the potential energy equation for gravity and list the properties used. $P=mgh$