



TRIANGLE  
CONGRUENCE USING  
ASA, AAS & HL

**AMC 8**

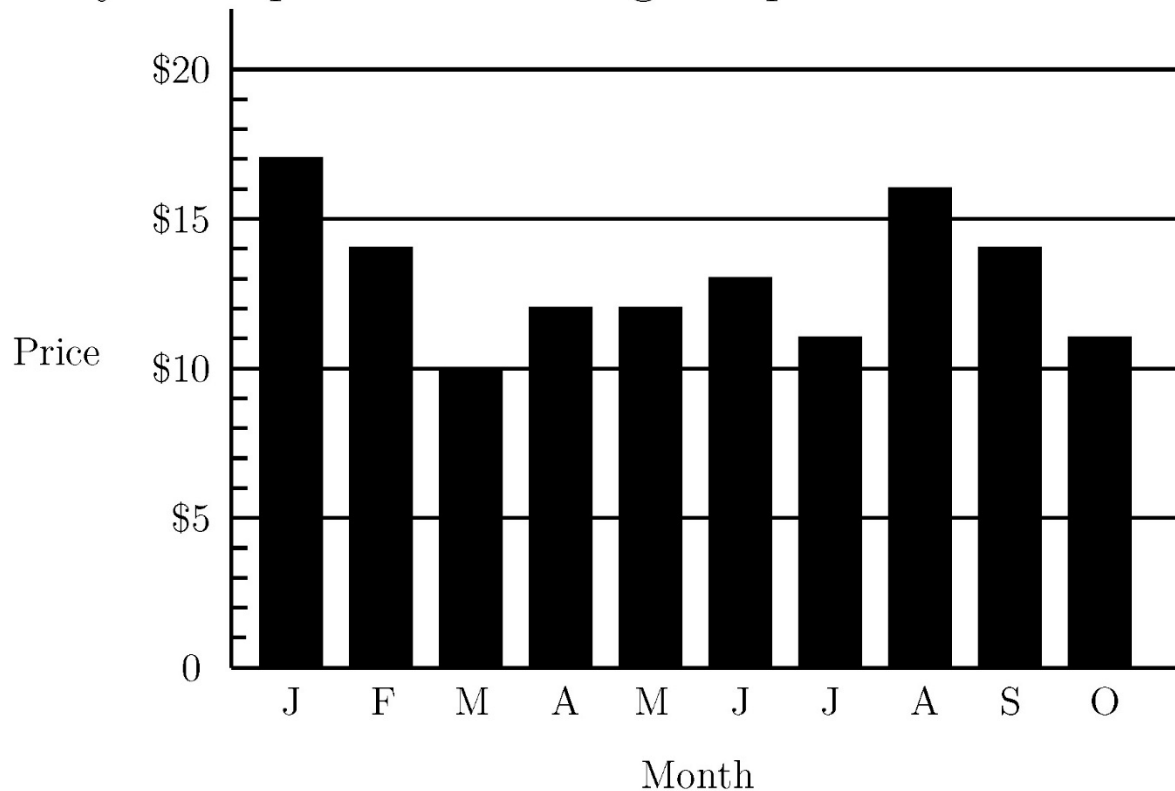
**Nov. 18 in**

**Class**

2. If  $a * b = \frac{a \times b}{a + b}$  for  $a, b$  positive integers, then what is  $5 * 10$ ?

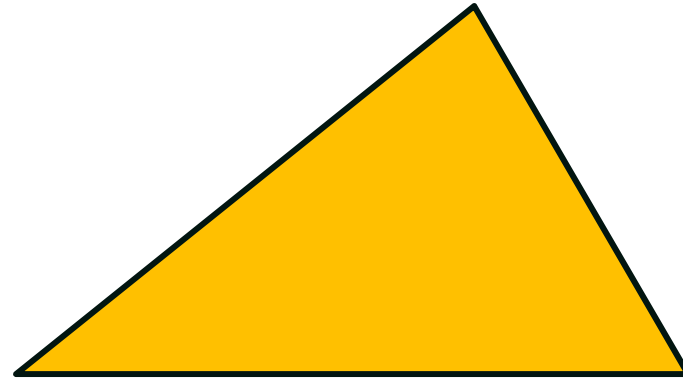
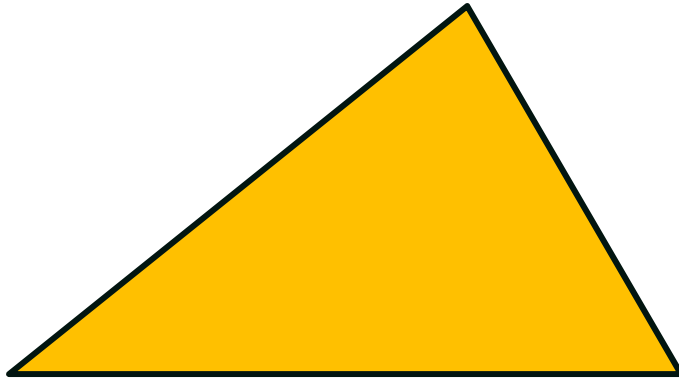
- (A)  $\frac{3}{10}$       (B) 1      (C) 2      (D)  $\frac{10}{3}$       (E) 50

3. The graph shows the price of five gallons of gasoline during the first ten months of the year. By what percent is the highest price more than the lowest price?



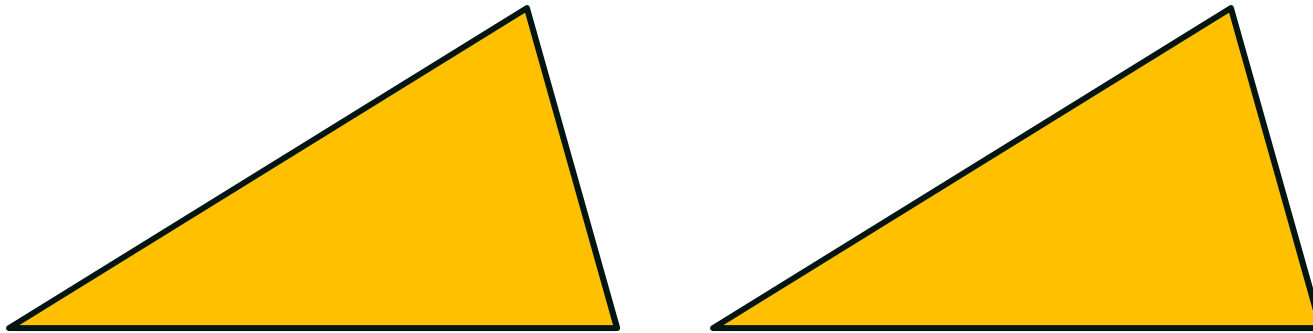
- (A) 50      (B) 62      (C) 70      (D) 89      (E) 100

# Angle-Side-Angle Postulate



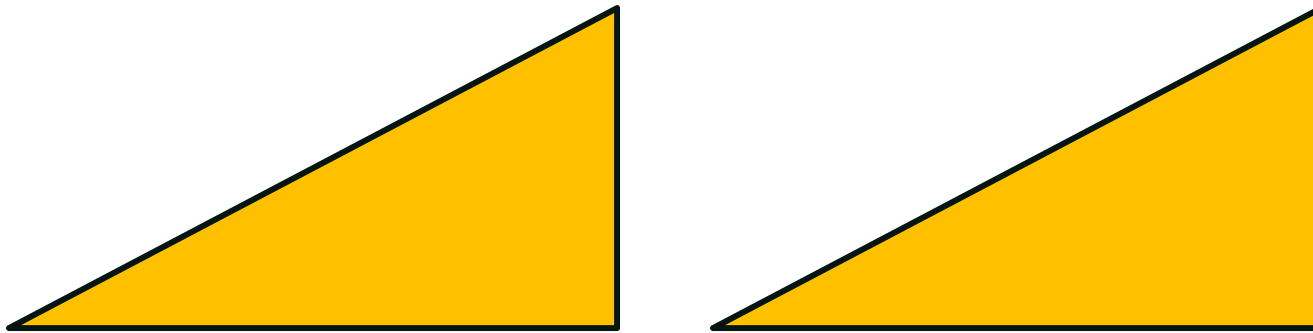
If \_\_\_\_\_ angles and the \_\_\_\_\_ side in one triangle are congruent to \_\_\_\_\_ angles and the \_\_\_\_\_ side in another triangle, then the two triangles are \_\_\_\_\_ .

# Angle-Angle-Side Postulate



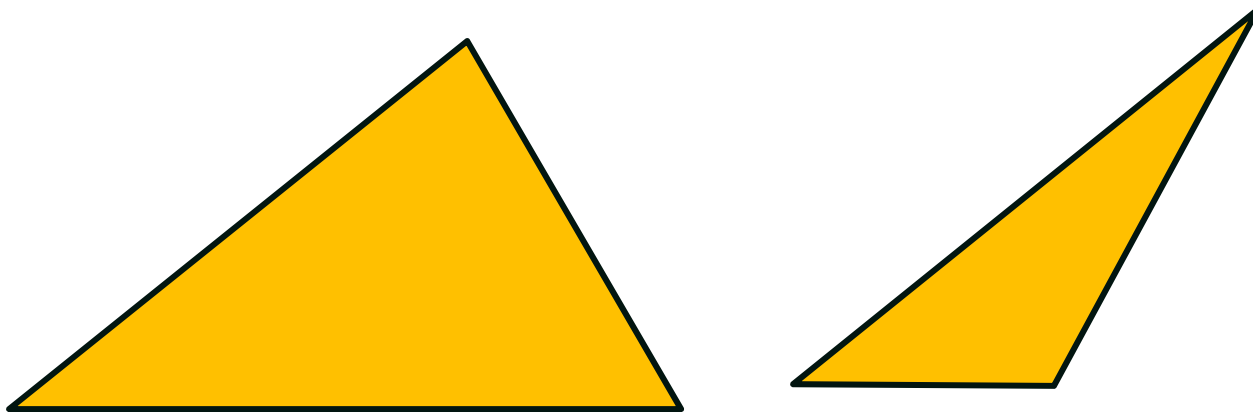
If \_\_\_\_\_ angles and the non-included side in one triangle are congruent to \_\_\_\_\_ angles and the \_\_\_\_\_ side in another triangle, then the two triangles are \_\_\_\_\_ .

# Hypotenuse-Leg Postulate

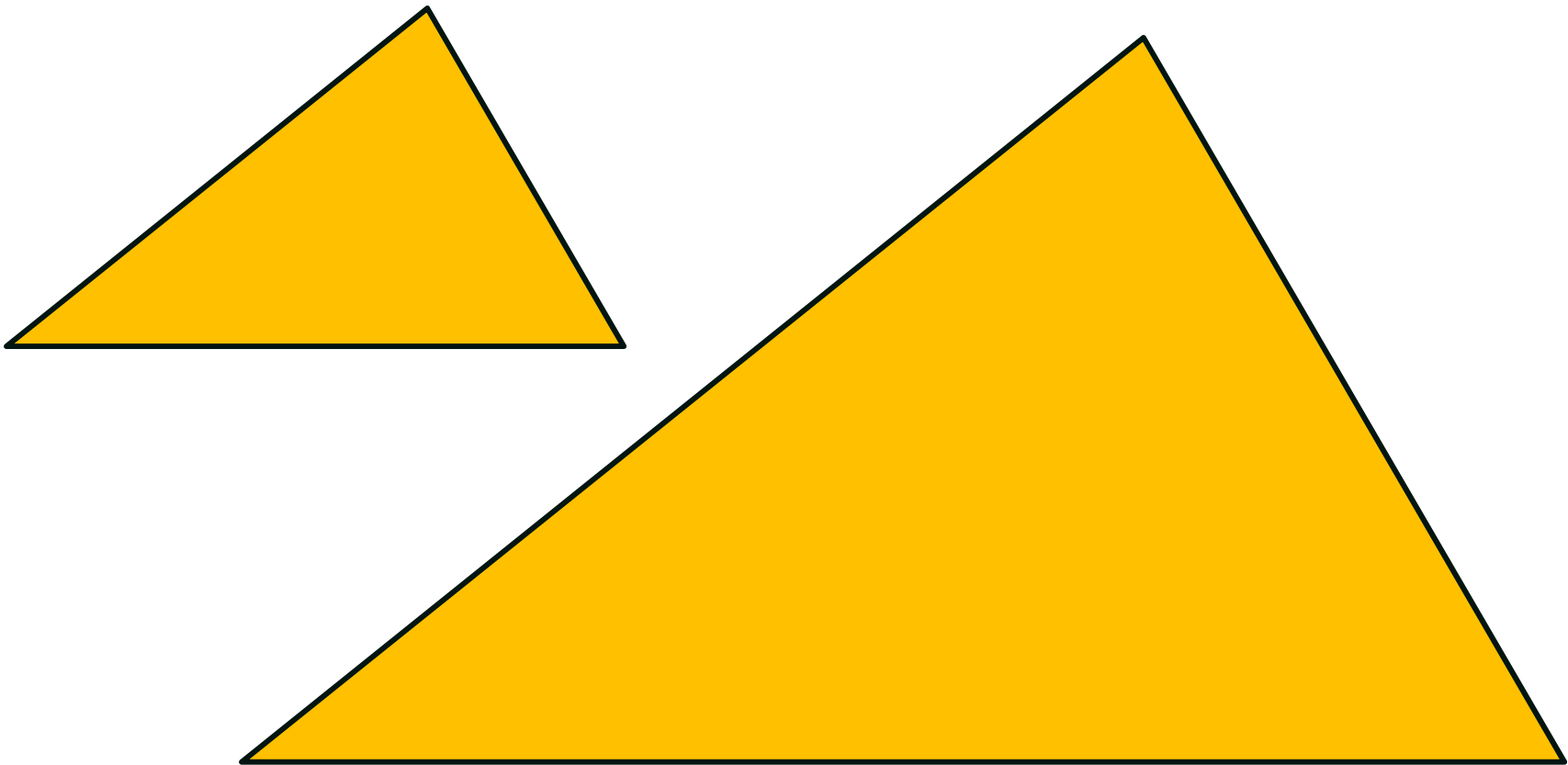


If the \_\_\_\_\_ and \_\_\_\_\_ in one right triangle are congruent to the \_\_\_\_\_ and \_\_\_\_\_ in another right triangle, then the two triangles are \_\_\_\_\_ .

# Angle-Side-Side Postulate



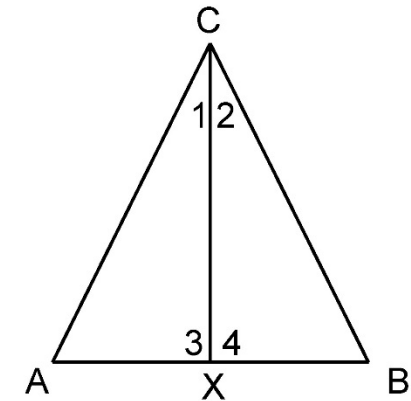
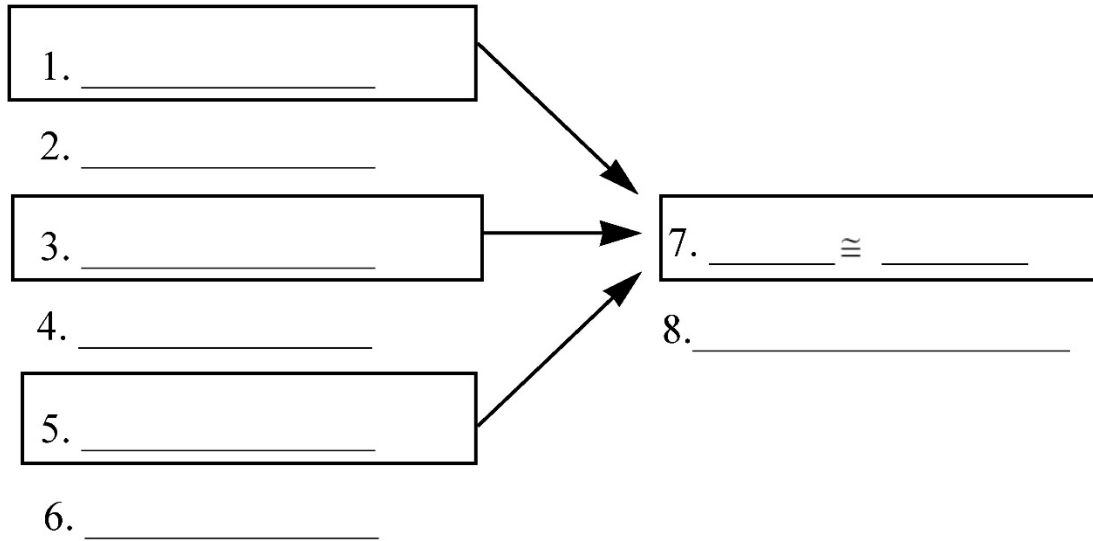
# Angle-Angle-Angle Postulate





# Flow Chart Proofs

Use the information to complete the following flow chart proof.



Given:  $\angle 1 \cong \angle 2$  ;  $\angle 3 \cong \angle 4$   
Prove:  $\triangle AXC \cong \triangle BXC$

# Flow Chart Proofs

Use the information to complete the following flow chart proof.

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

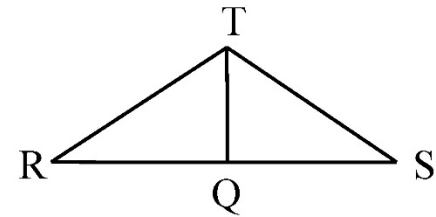
6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_  $\cong$  \_\_\_\_\_

10. \_\_\_\_\_



Given:  $\overline{TQ}$  bisects  $\angle RTS$ ;  $\angle R \cong \angle S$

Show:  $\overline{RQ} \cong \overline{QS}$





