EOC Review
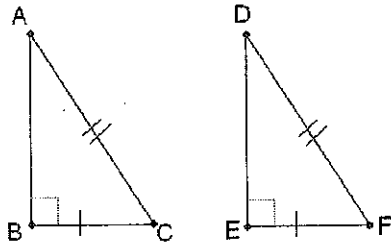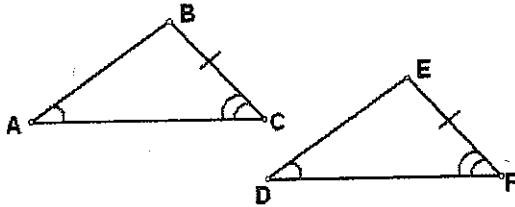
1)

Which reason explains the congruency of these two triangles?

A) AAA

B) HL

C) SAS

D) SSS

2)
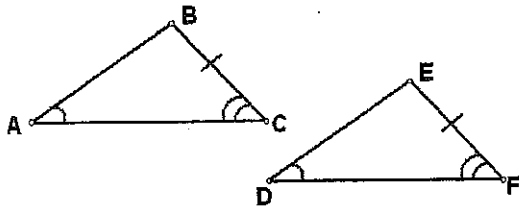

Which of the statements about the two triangles is correct?

A) The triangles are congruent by AAA.

B) These triangles are congruent by AAS.

C) These triangles are congruent by SSS.

D) These triangles are congruent by SSA.

3) For which pair of triangles would you use AAS to prove the congruence of the 2 triangles?

A)

B)

C)

D)
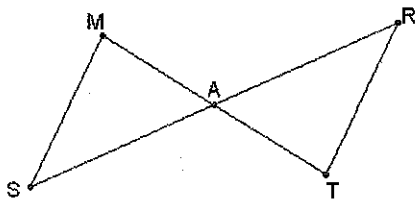
4)

Using only the markings in the diagram, what theorem can be used to prove that the triangles are congruent?

A) AAA

C) SAS

B) AAS

D) SSS

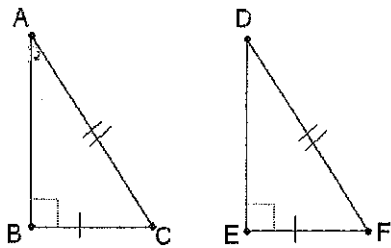5)

△SAM≅△RAT

Which statement is not necessarily true?

A) MA = TA

C) ∠M≅∠R

B) MS = TR

D) ∠M≅∠T
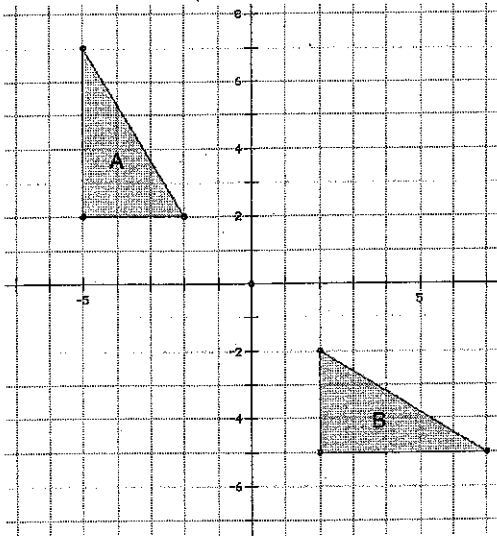

6)

What theorem can be used to prove that the two triangles are congruent?

A) HL

C) LL

B) LA

D) SSS

7)

Describe the transformations that will map triangle A to triangle B and illustrate the similarity between the two triangles.

A) reflect triangle A across the y-axis and then translate triangle A 5 units down

C) translate triangle A 4 units down and then rotate triangle A 180° counterclockwise about the origin

B) reflect triangle A across the x-axis and then reflect triangle A across the y-axis

D) reflect triangle A across the x-axis and then rotate triangle A 90° counterclockwise about the origin

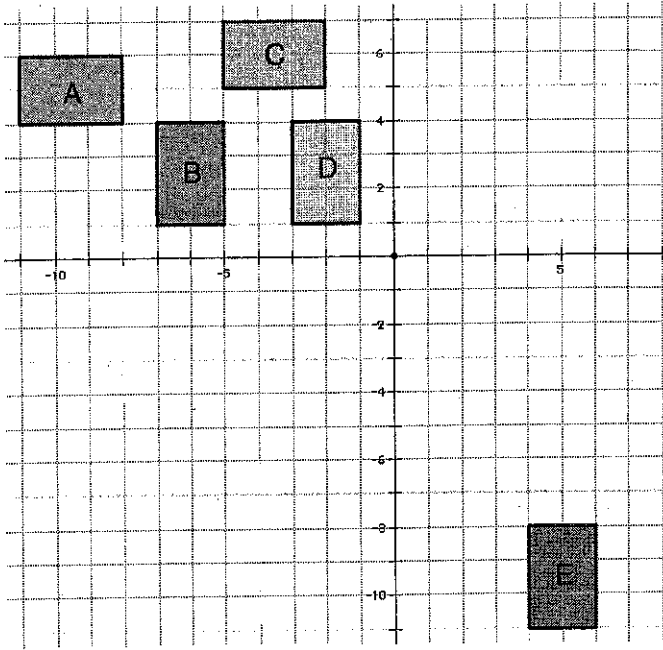8)
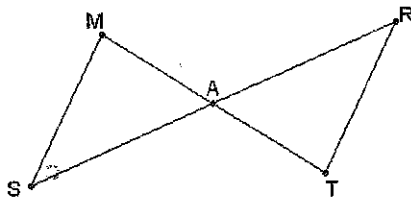
If triangle MAS ≅ triangle TAR. Which of the statements could be false?

A) segment $\overline{MA}$ ≅ segment $\overline{TA}$

C) ∠ASM ≅ ∠ART

B) segment $\overline{MA}$ ≅ segment $\overline{SA}$

D) ∠MAS ≅ ∠TAR

9)

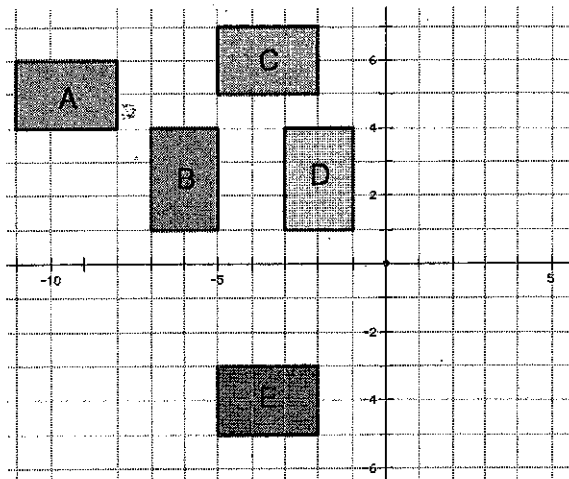reflect across the x-axis and then rotate 90° counterclockwise about the origin

Determine which rectangle was transformed to result in rectangle E.

A) rectangle A C) rectangle C

B) rectangle B D) rectangle D

10)

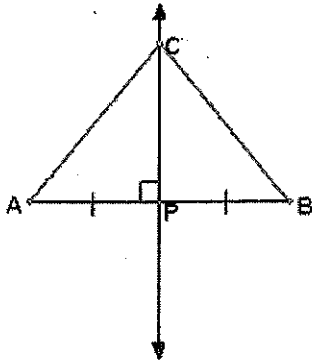reflect across the x-axis and then translate up 2 units

Determine which rectangle was transformed to result in rectangle E.

A) rectangle A C) rectangle C

B) rectangle B D) rectangle D

11)

Which of the choices shown could be used to prove that $\triangle ACP \cong \triangle BCP$?

A) AAA   C) SAS
B) CPCTC   D) SSA

12)
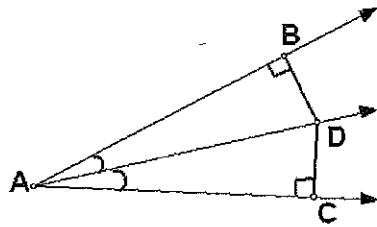
By which reason can it be proven that triangles DAB and DAC are congruent?

A) AAA   C) SSA
B) AAS   D) SSS

13) For which pair of triangles would you use SAS to prove the congruence of the 2 triangles?

A)

B)

C)

D)

14)

What theorem can be used to prove that the two triangles are congruent?

A) AAS

B) ASA

C) SAS

D) SSS

15) What does it mean if two figures are congruent?
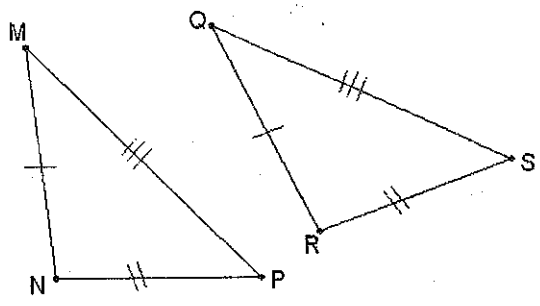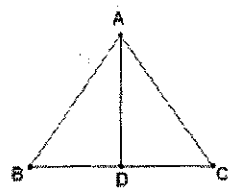
A) Congruent figures have the same size and the same shape.

B) Congruent figures have different sizes and different shapes.

C) Congruent figures have the same size but are different shapes.

D) Congruent figures have the same shape but are different sizes.

16) △ ABC is isosceles. Angles B and C are congruent. The m∠A = 40°, m∠B = (3x + 1)°. Find x.

A) 13

B) 23

C) 46.3

D) 70

17)

Statements	Reasons
1. $\overline{AB} \cong \overline{AC}$	1. Given
2. △ABC is isosceles	2. Definition of isosceles △
3. $\overline{BD} \cong \overline{CD}$	3. Given
4. ∠B ≅ ∠C	4. Base angles an isosceles triangle are ≅
5. △ABD ≅ △ACD	5. ???

Choose the missing reason in the proof.

A) AAS

B) ASA

C) SSA

D) SAS

18)

What additional information can be used to prove ΔVUW ≅ ΔYXZ by SAS?

A) $\overline{WU} \cong \overline{ZX}$

B) $\overline{WU} \cong \overline{ZY}$

C) $\overline{XZ} \cong \overline{VU}$

D) $\overline{XY} \cong \overline{VU}$

19)

What additional information can be used to prove ΔVUW ≅ ΔYXZ by ASA?

A) $\angle V \cong \angle Z$

B) $\angle W \cong \angle Z$

C) $\angle X \cong \angle U$

D) $\angle V \cong \angle Y$