

Geometry Unit 4 Review

Congruent Triangles

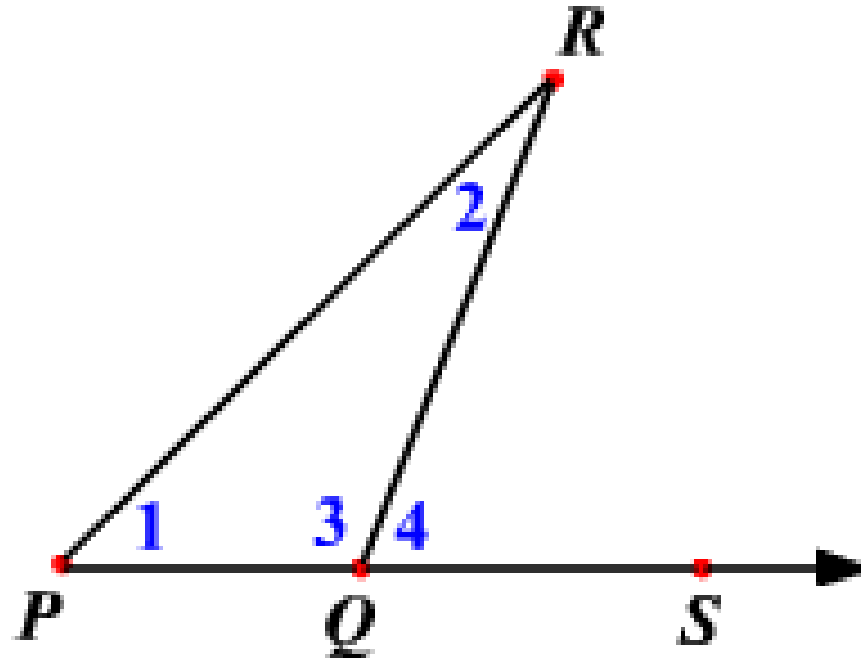


Standards

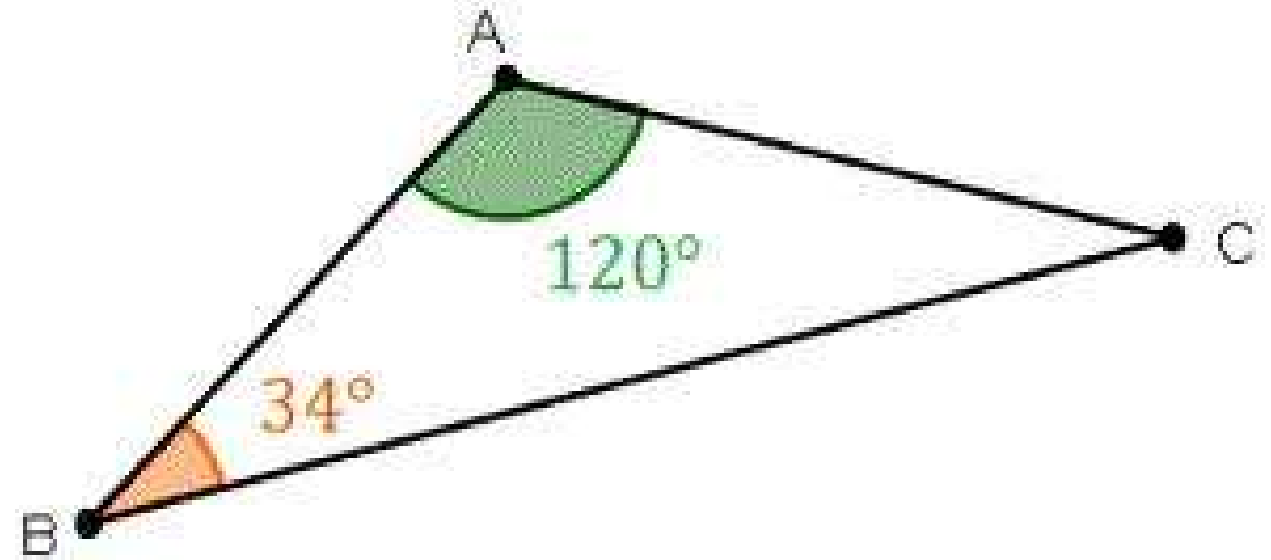
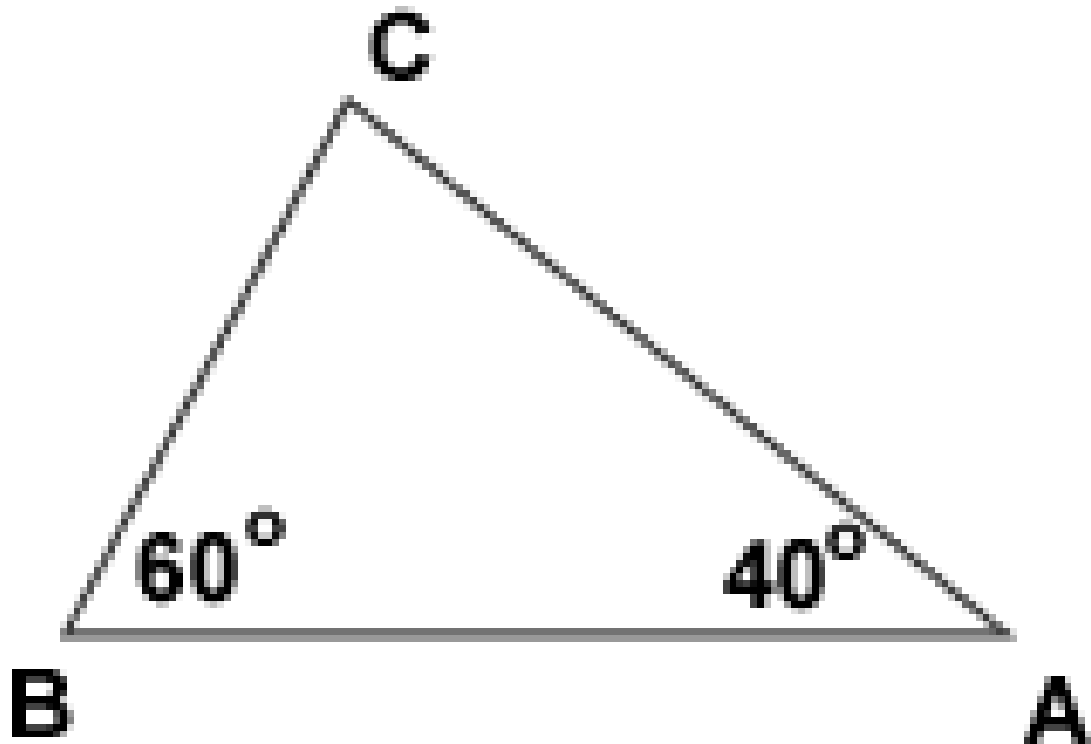
- **Standard 25: Identify interior and exterior angles of a triangle and identify the relationships between them.**
- **Standard 26: Utilize the triangle sum theorem to determine angles of a triangle.**
- **Standard 27: Identify corresponding parts of congruent triangles and write congruence statements of triangles.**
- **Standard 28: Use the distance formula to determine side lengths of triangles.**
- **Standard 29: Determine if triangles are congruent using SSS, SAS, ASA, AAS, or HL postulates.**
- **Standard 30: Determine corresponding congruent parts of equilateral and isosceles triangles.**
- **Standard 31: Use transformations of translations, reflections, and rotations to create congruent triangles in the coordinate plane.**
- **Standard 32: Use properties of similarity to determine if two triangles are similar but not congruent.**
- **Standard 33: Use properties of congruence to solve real-world applications.**



Standard 25: Identify interior and exterior angles of a triangle and identify the relationships between them.

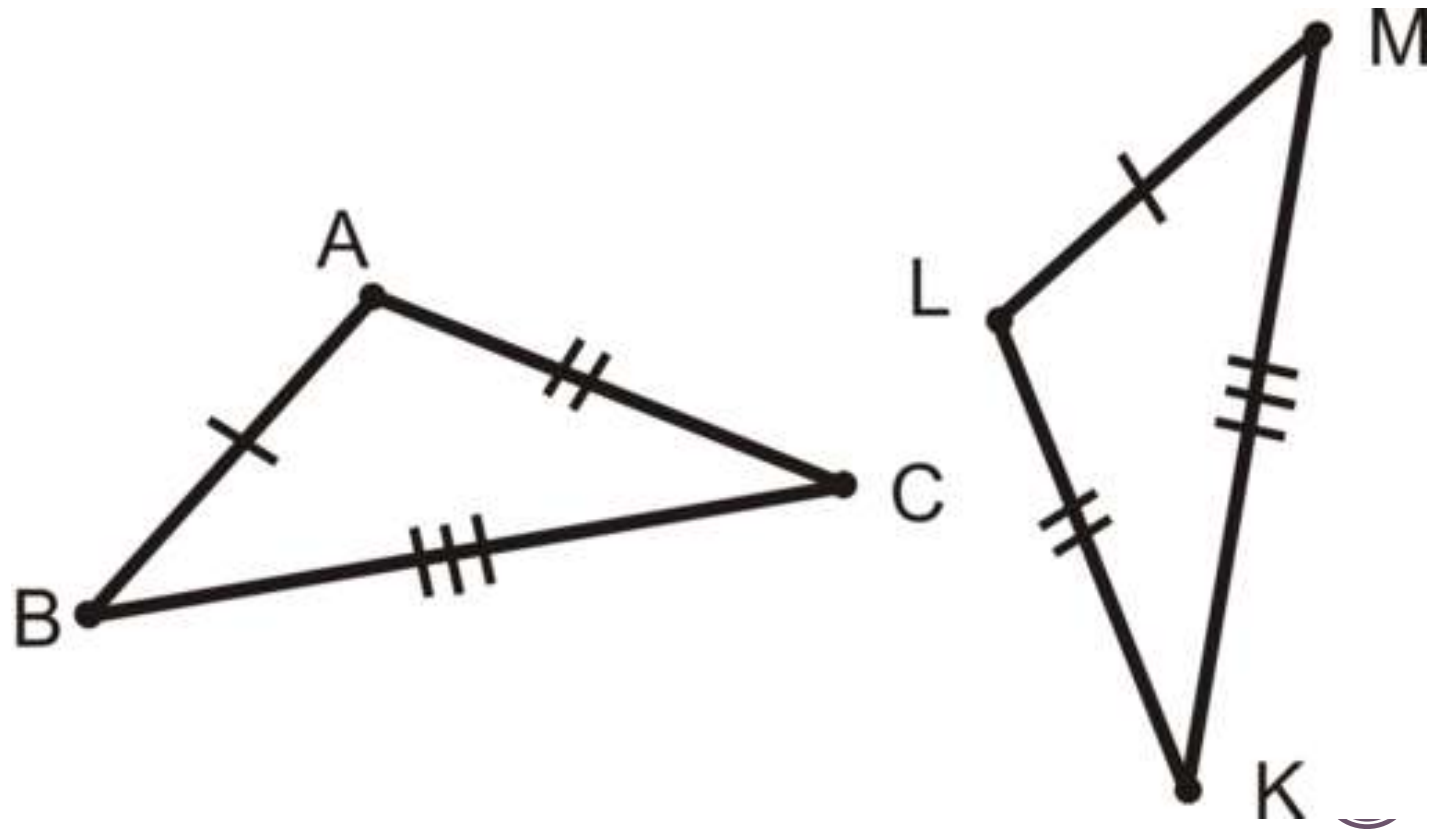


Standard 26: Utilize the triangle sum theorem to determine angles of a triangle.



Standard 27: Identify corresponding parts of congruent triangles and write congruence statements of triangles.

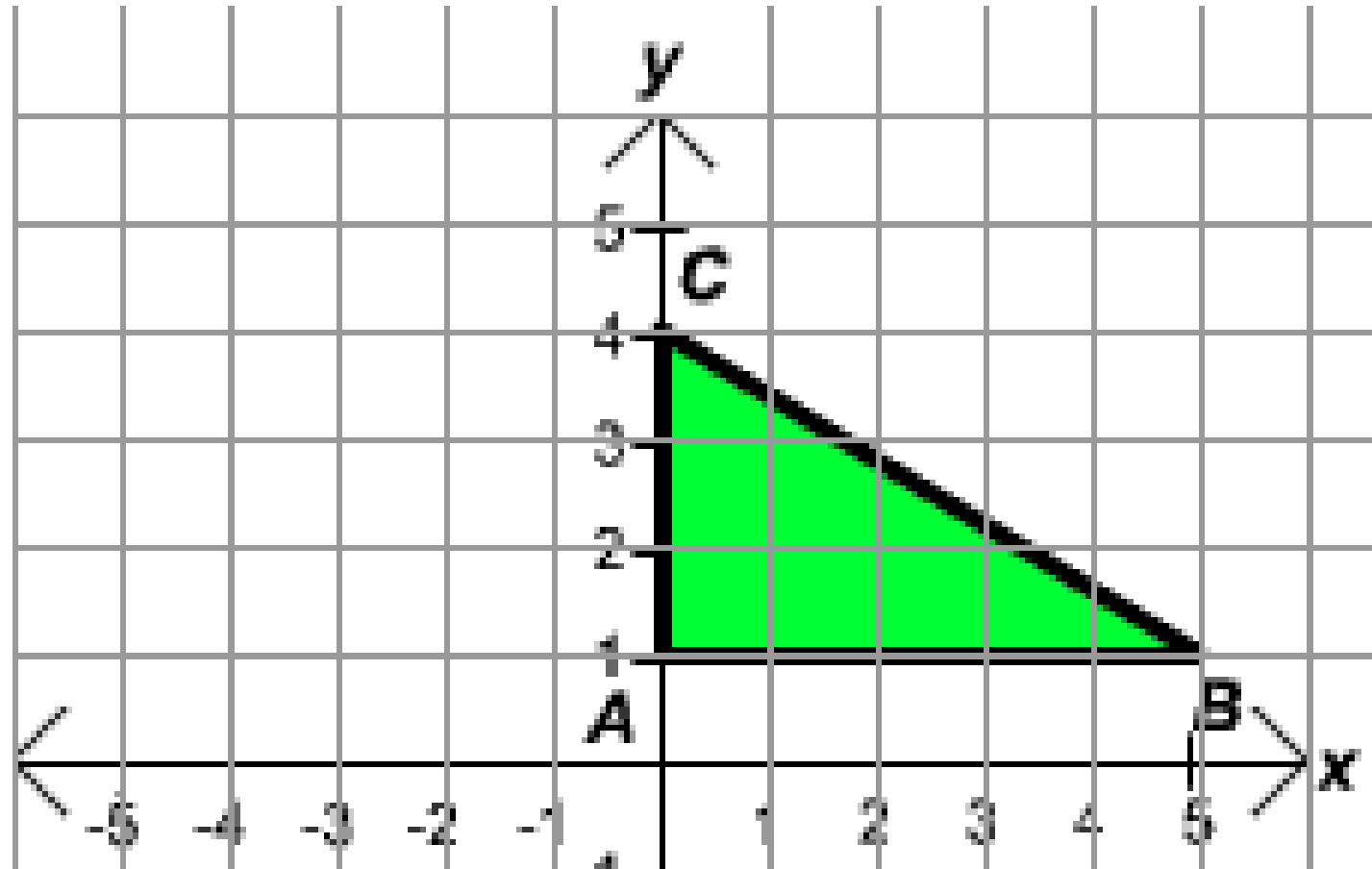
- Write a congruence statement and name all congruent parts.



Standard 28: Use the distance formula to determine side lengths of triangles.

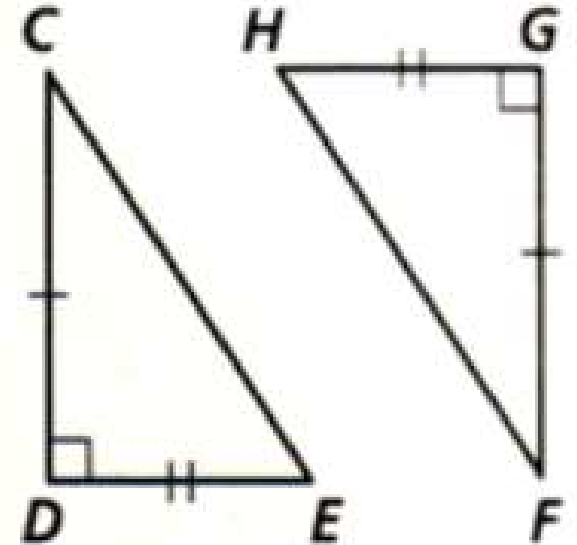
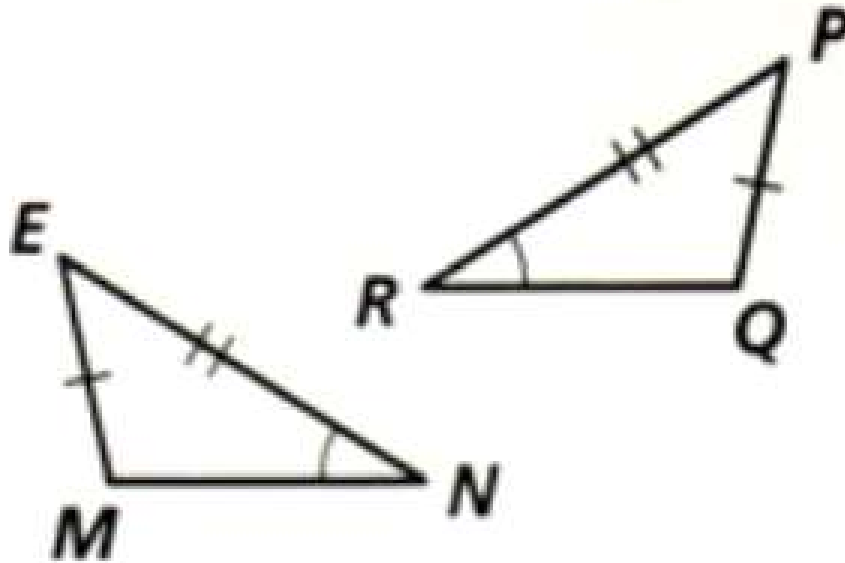
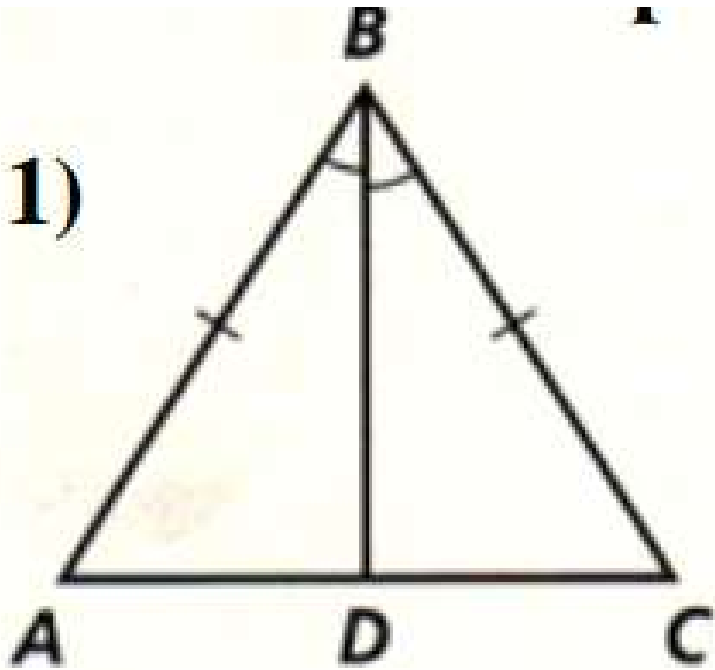
■ Distance Formula:

$$\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$



Standard 29: Determine if triangles are congruent using SSS, SAS, ASA, AAS, or HL postulates.

1)



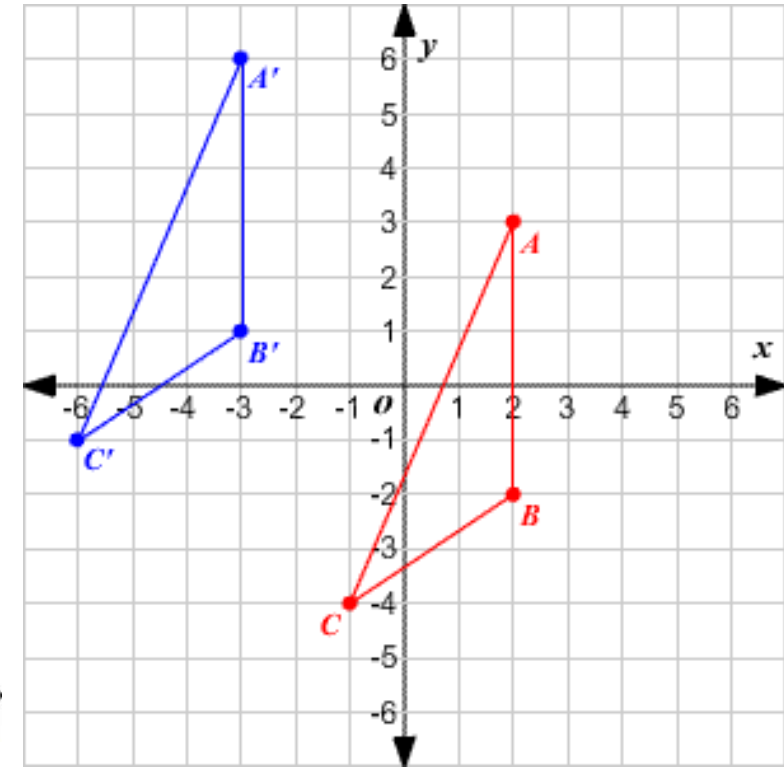
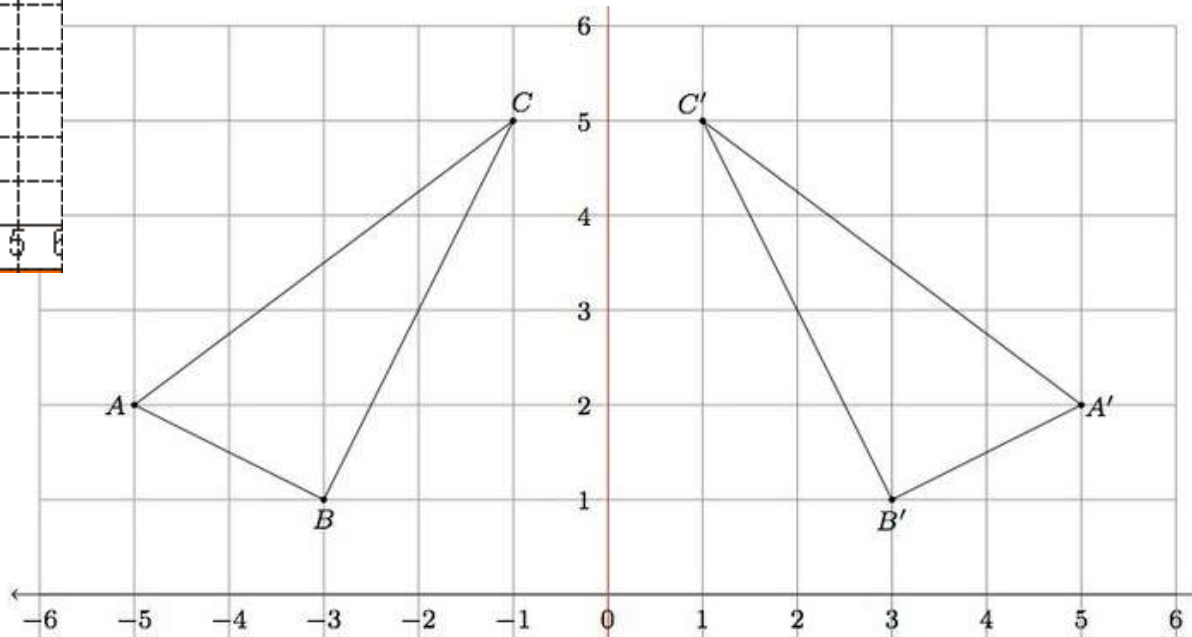
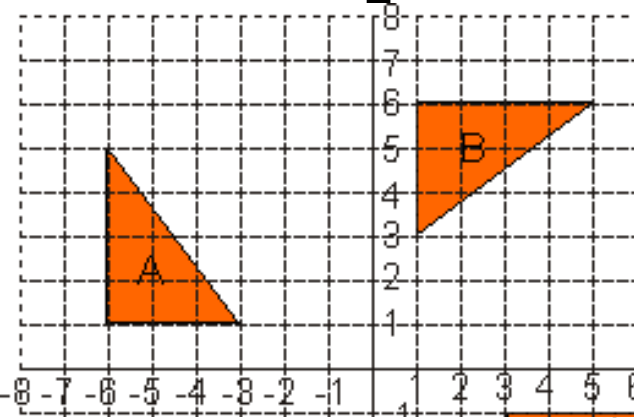
Standard 30: Determine corresponding congruent parts of equilateral and isosceles triangles.

- **Given an equilateral triangle, what do you know about the sides and angles?**
- **Given an isosceles triangle, what do you know about the sides and angles?**



Standard 31: Use transformations of translations, reflections, and rotations to create congruent triangles in the coordinate plane.

- Which transformation do the pictures represent?



Standard 32: Use properties of similarity to determine if two triangles are similar but not congruent.

- **Will not be tested on.**



Standard 33: Use properties of congruence to solve real-world applications.

- **Will not be tested on.**

