## Transformations

Given Triangle ABC,

1. Reflect across $x$-axis

2. Rotate $180^{\circ}$

3. Translate up 4 units

4. Reflect across $y$-axis

5. Rotate $90^{\circ}$ clockwise

6. Translate left 6 units

7. Reflect across $y=x$

8. Rotate $90^{\circ}$ counterclockwise

9. $(x, y) \rightarrow(x-5, y-2)$

$\qquad$

## Geometry

Vertical angles are always $\qquad$ . Draw an example.

Linear pairs always $\qquad$ . Draw an example.

Supplementary angles always $\qquad$ .

Complementary angles always $\qquad$ .

Draw 2 parallel lines cut by a transversal. Label the eight angles 1 through 8.

Name 2 pairs of alternate interior angles.
Alternate interior angles formed by parallel lines are $\qquad$ .

Name 2 pairs of alternate exterior angles.
Alternate exterior angles formed by parallel lines are $\qquad$ .

Name 4 pairs of corresponding angles.
Corresponding angles formed by parallel lines are $\qquad$ .

Name 2 pairs of consecutive (same-side) interior angles.
Consecutive (same-side) interior angles formed by parallel lines are $\qquad$ .

Draw a picture of an exterior angle of a triangle.

The three interior angles of a triangle add up to $\qquad$

An exterior angle of a triangle is equal to the sum of $\qquad$ .

An isosceles triangle has two $\qquad$ . If the sides are congruent the
$\qquad$ are also congruent.

An equilateral triangle has three $\qquad$ . If all the sides are congruent, then
$\qquad$ -.

A midsegment of a triangle $\qquad$ . It is parallel to the third side and
$\qquad$ . Draw a picture.
$\qquad$

Congruent figures have congruent sides and angles.

There are 5 ways to prove two triangles are congruent.
List them and draw a picture to show an example of each.

Similar figures have congruent angles and proportional sides.

There are 3 ways to prove two triangles are similar.
List them and draw a picture to show an example of each.

## Right Triangles

Pythagorean Theorem: $\qquad$

Special right triangles:

45/45/90
30/60/90

Trigonometry:
$\operatorname{Sin} A=$ $\qquad$ $\operatorname{Cos} \mathrm{A}=$ $\qquad$ $\operatorname{Tan} \mathrm{A}=$ $\qquad$

Find a missing side.


Find a missing angle.


