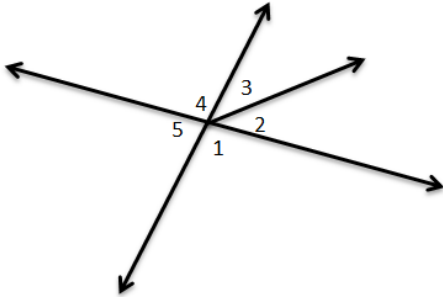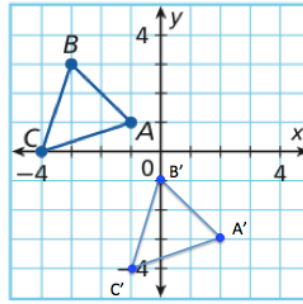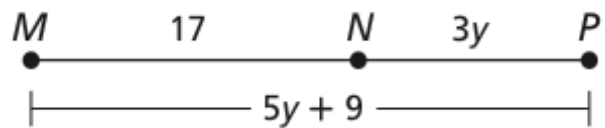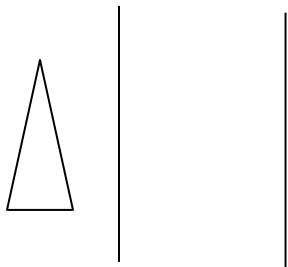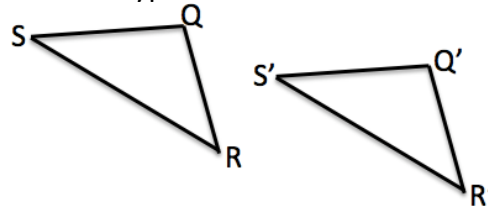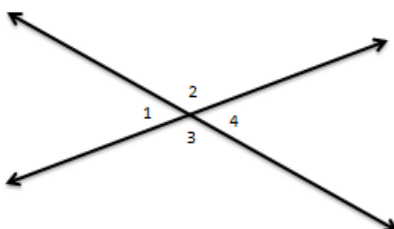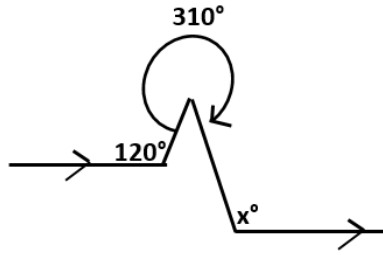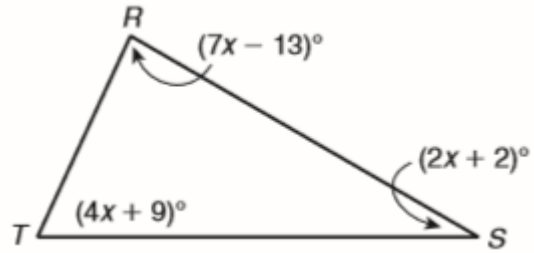| 1. Identify all the adjacent angles pairs that form a linear pair.	2. Write a rule for the transformation. (x, y) → (,)
3. ∠XYZ and ∠PQR are supplementary. Find the measure of each angle. m∠XYZ = 2x° and m∠PQR = (8x – 20)°	4. After a rotation of 90° was applied, the image was at A'(4, 2), B'(2, 6), C'(10, 1). What are the coordinates of the preimage?
5. An angle measures 9 less than 8 times its supplement. Find the measure of the angle and the measure of the supplement.	6. Find the length of MP
7. The triangle is reflected over each parallel line. What is the total distance it would move if the lines are 15 cm apart? What type of transformation occurs from the original figure to the final figure?	8. What type of transformation occurred?
9. m∠1 = 75° Find the measure of each angle in the figure. What type of angle pair are ∠1 and ∠4? What type of angle pair are ∠1 and ∠3?	10. The triangle is reflected over the two intersecting lines. If the triangle moved 150° what was the angle between the intersecting lines? What type of transformation occurs from the original figure to the final figure? Where is the point of rotation?
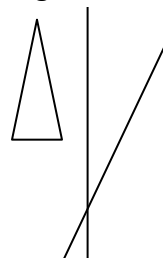
11. Find the measure of x.	12. Find the measure of a.
310° 120° x°	a° 75° 60°
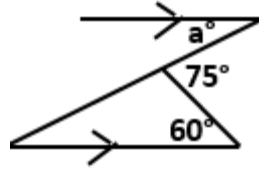
| 13. Segment EF measures (7a – 17) cm and segment FG measures (4a + 1) cm. Find the length of segment EG.
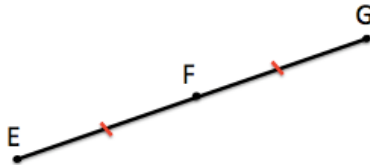
G
F
E | 14. Find the measure of each angle.

R
$(7x - 13)°$
$(2x + 2)°$
$(4x + 9)°$
T   S |

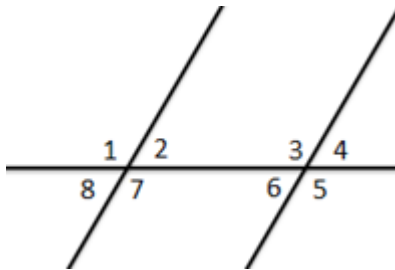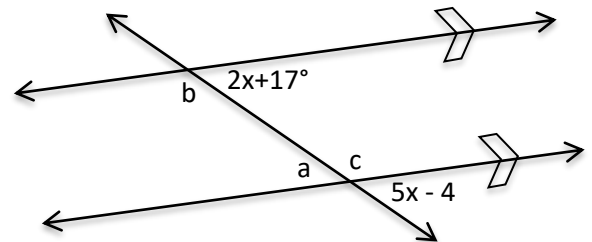| 15. Name the type of pair and the relationship between them	16. Find the unknown measures

15. Name the type of pair and the relationship between them

1. $\angle 8$ and $\angle 2$ _____

2. $\angle 1$ and $\angle 5$ _____

3. $\angle 7$ and $\angle 6$ _____

4. $\angle 4$ and $\angle 5$ _____

5. $\angle 2$ and $\angle 6$ _____

6. $\angle 8$ and $\angle 6$ _____

1 / 2   3 / 4
8 / 7   6 / 5

16. Find the unknown measures

x = _____

m$\angle$a = _____

m$\angle$b = _____

m$\angle$c = _____

b   2x+17°

a   c
   5x - 4

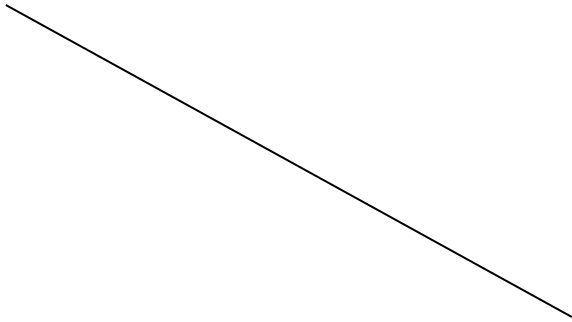| 17. Find the value of x.

L
$(2x + 32)°$
K   M | 18. Find the value of y.

O
$5y - 6$ $4y + 12$
N   P | 19. Find m$\angle$A.

B
A   D   C |
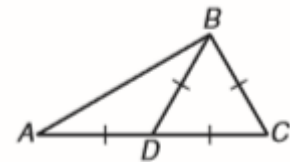
Review Part 2: Due at the start of class on Thursday 10/17 or Friday 10/18 before you take the midterm.

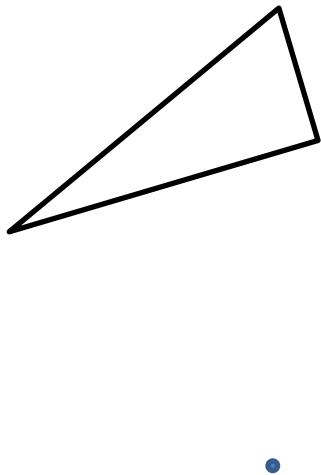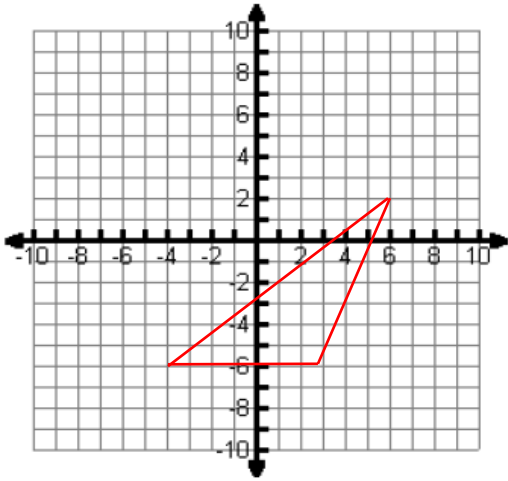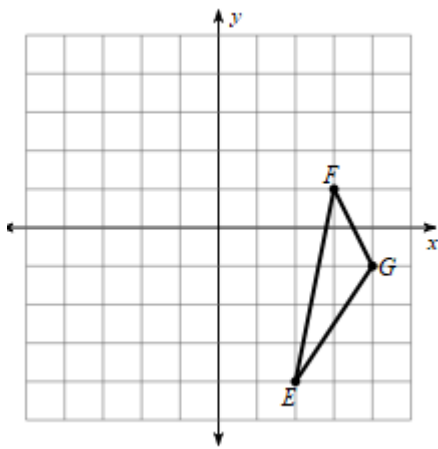| 20. Bisect the segment below using a compass. Mark the congruent segments.	21. Draw ∠MOP = 67°. Bisect the angle using a compass.
22. Construct an equilateral triangle using only your compass and a straight edge. It should have the given side length. _____	23. Construct an isosceles triangle. Mark and congruent sides and any congruent angles.
24. Rotate the triangle –70° about the given point using a compass and protractor.	25. Find the center and angle of rotation. Label the center point x.
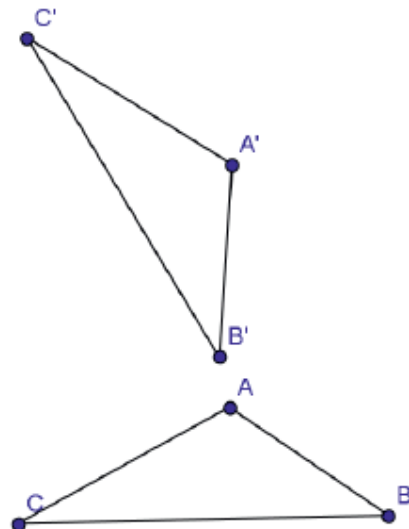
26. Rotate the figure 90° (x, y) → (,)	27. Reflect the figure over the x-axis (x, y) → (,)
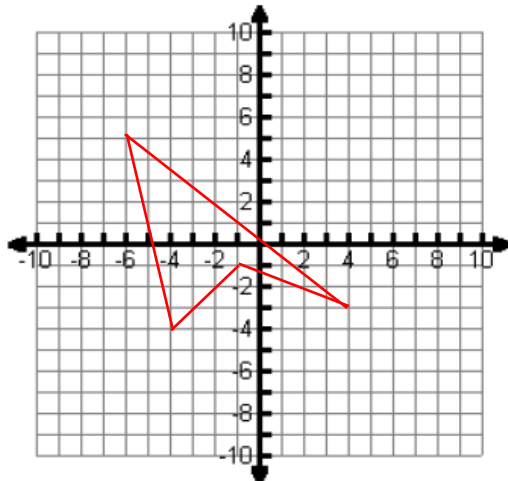
28. Apply the rule (x, y) → (y, x). What type of transformation happened? Be as specific as possible.	29. Apply the rule (x, y) → (−x, −y). What type of transformation happened? Be as specific as possible.
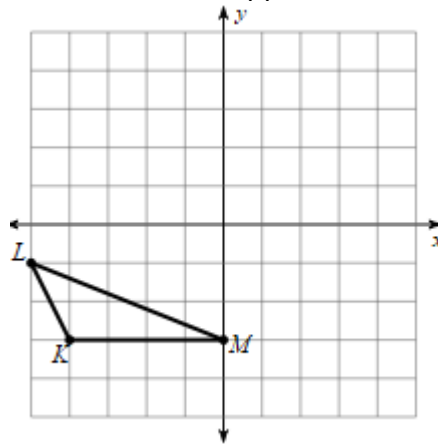
30. Reflect the triangle over the line using your compass and a straight edge.