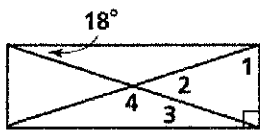


Are each of the following:

- A. a formal definition (something you would read out of a textbook),
- B. a description (in your own words),
- C. neither Explain:

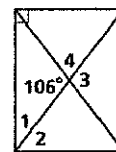
1. _____ A hexagon is a shape with 6 sides
2. _____ A pentagon is a plane figure with five straight sides and five angles.
3. _____ A plane is a flat surface that has no thickness and extends forever in all directions
4. _____ A point is a location. It has no size.
5. _____ A line is a series of points that extends forever in both directions.

6.



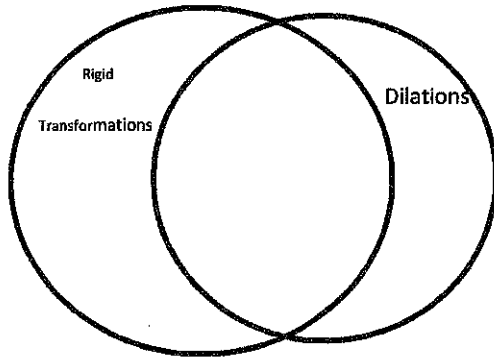
- $m\angle 1$ _____
- $m\angle 2$ _____
- $m\angle 3$ _____
- $m\angle 4$ _____

7.



- $m\angle 1$ _____
- $m\angle 2$ _____
- $m\angle 3$ _____
- $m\angle 4$ _____

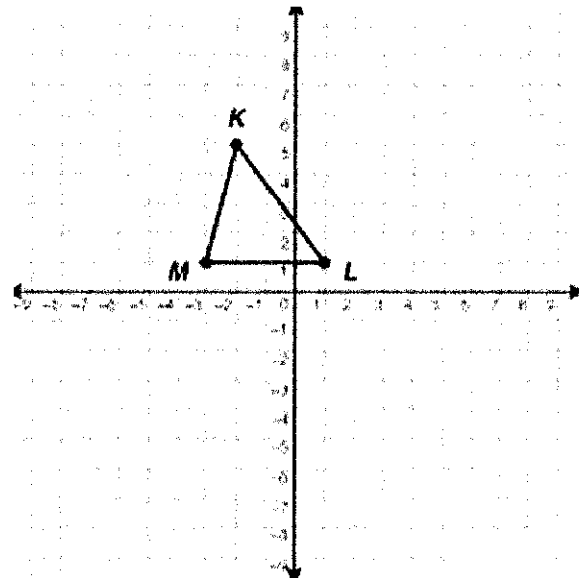
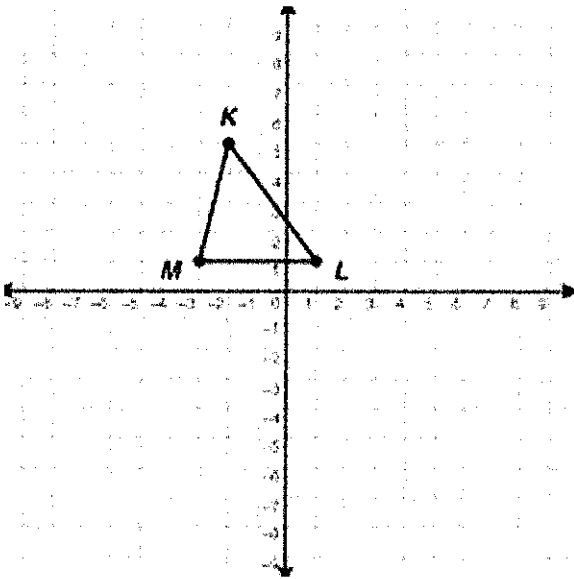
8. Compare the properties of rigid transformations and dilations



- Angles are congruent
- Side lengths are congruent
- Shape is the same
- Side lengths change

9. Dilate $\triangle KLM$ with scale factor 2 center M

10. Dilate $\triangle KLM$ with scale factor 2 center K



A. are any side lengths congruent? If so, which ones? If not, why?

B. In problem 9 with center M, which sides are parallel? _____

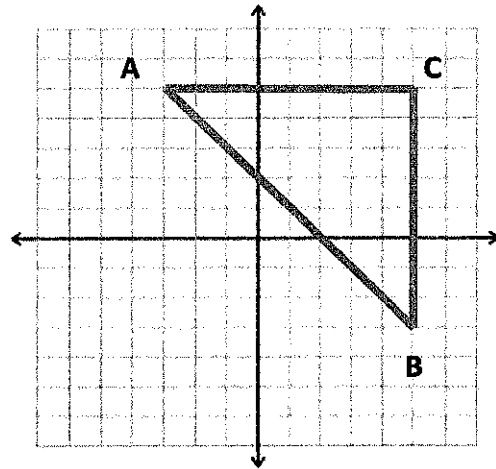
C. In problem 10 with center K, which sides are parallel? _____

11.

What is the midpoint of \overline{AB} ? _____

What is the perimeter of the triangle?

What is the area of the triangle?

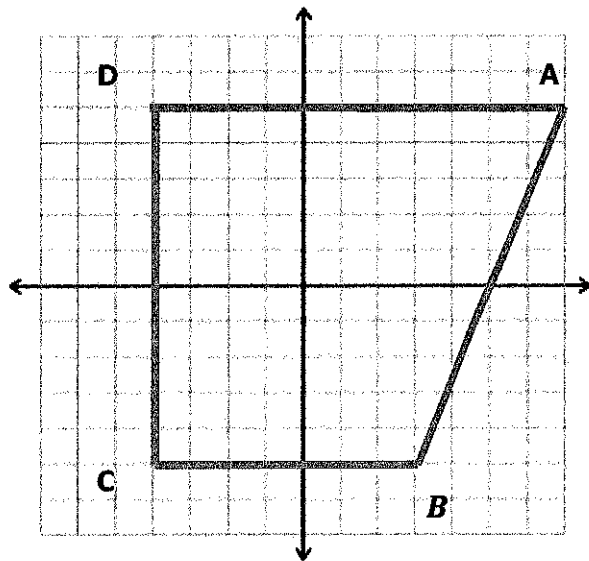


12.

What is the midpoint of \overline{AB} ? _____

What is the perimeter of the figure?

What is the area of the figure?



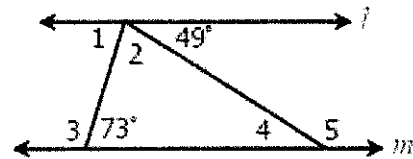
13.

A. $m\angle 1$ _____

B. $\angle 1$ and 73° are what kind of angles?

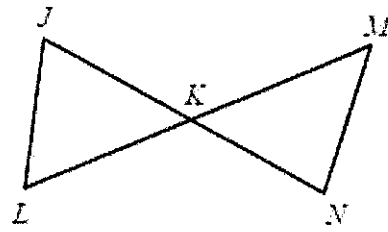
C. $m\angle 3$ _____

D. $\angle 3$ and 73° are what kind of angles? _____



14. Given: $\angle J \cong \angle N, \overline{JK} \cong \overline{NK}$

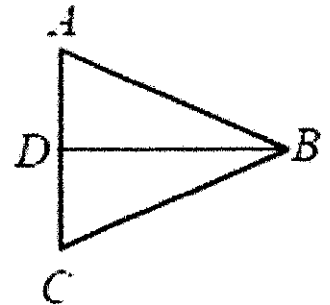
Prove: $\triangle JKL \cong \triangle NKM$



Statements	Reasons
1. $\angle J \cong \angle N, \overline{JK} \cong \overline{NK}$	
2. $\angle JKL \cong \angle NKM$	
3. $\triangle JKL \cong \triangle NKM$	

15. Given: $\angle ABD \cong \angle CBD, \overline{AB} \cong \overline{CB}$

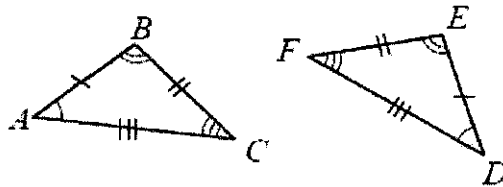
Prove: $\triangle ABD \cong \triangle CBD$



Statements	Reasons
1. $\angle ABD \cong \angle CBD, \overline{AB} \cong \overline{CB}$	
2. $\overline{DB} \cong \overline{DB}$	
3. $\triangle ABD \cong \triangle CBD$	

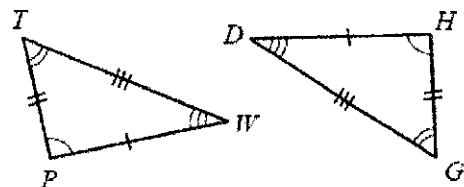
16. $\triangle ABC \cong$ _____

$\triangle BAC \cong$ _____



17. $\triangle WPT \cong$ _____

$\triangle PTW \cong$ _____



18. $\triangle ABC \cong$ _____

$\triangle CAB \cong$ _____

19. _____ $\angle ACB \cong \angle ECD$ is an example of

A. corresponding angles

B. reflexive property

C. vertical angles

D. triangle angle sum theorem

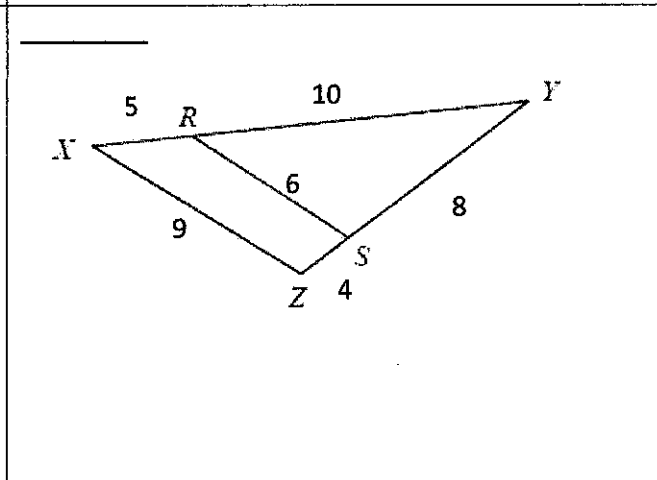
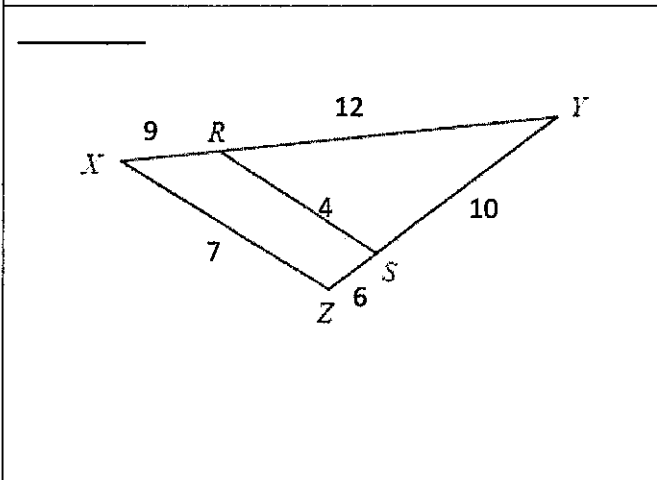
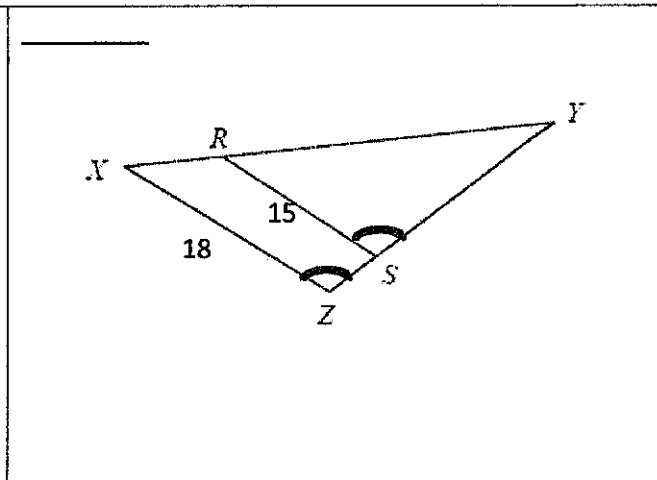
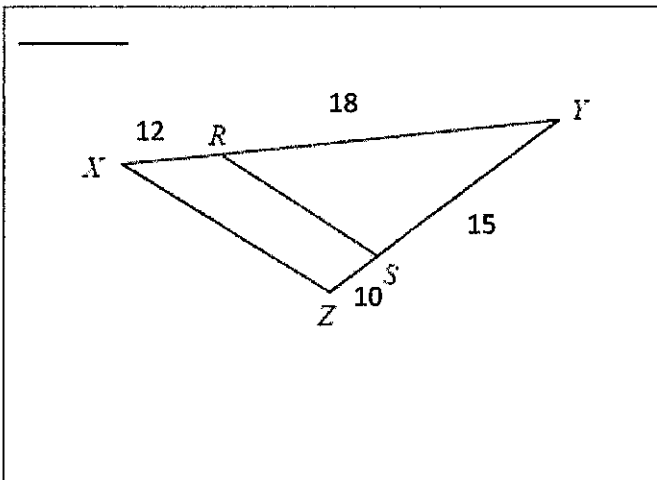
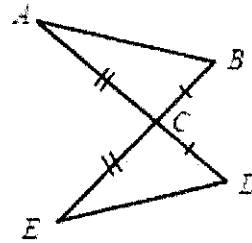
20. Matching: Give the similarity ratio when possible. Use each answer once.

A. AA~

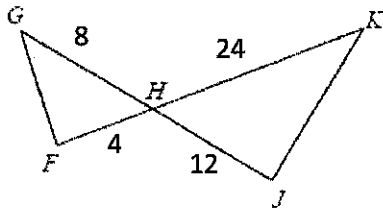
B. SSS~

C. SAS~

D. not similar



21.



Similarity ratio: _____

$\triangle HGF \sim \triangle$ _____ by _____

$$\frac{GF}{HJ} = \frac{GH}{HF} = \frac{HF}{HJ}$$

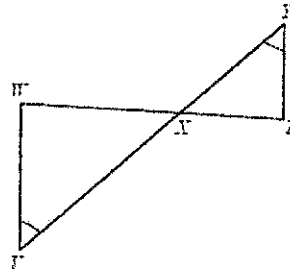
23. $y = \frac{3}{4}x - 3$

Write the equation for the line
that is parallel to the given line through
(-8, 4)

25. $y = \frac{3}{4}x - 3$

Write the equation for the line
that is perpendicular to the given line through
(-6, 10)

22.



$\triangle WXV \sim \triangle$ _____ by _____

$$\frac{WX}{YZ} = \frac{WV}{ZY} = \frac{VX}{XZ}$$

24. $y = \frac{1}{4}x - 7$

Write the equation for the line
that is parallel to the given line through
(12, 8)

26. $y = \frac{1}{4}x - 7$

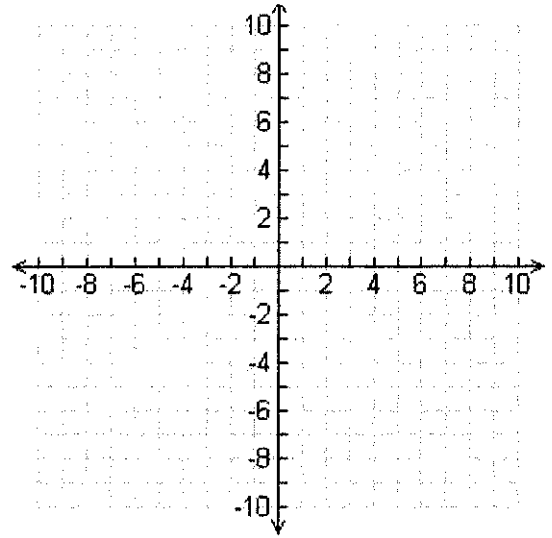
Write the equation for the line
that is perpendicular to the given line through
(5, -8)

27. compare the slopes of the lines created by:

Line 1: (5, 4) and (8, 1)

Line 2: (-3, 6) and (-2, 5)

You may graph or use the slope formula.



28. _____ Which pair of slopes would be perpendicular to each other?

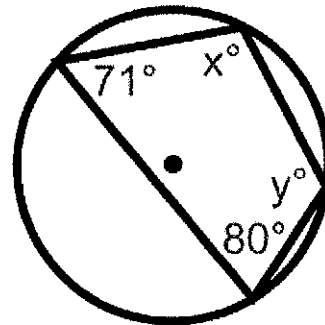
A. -2, 2

B. $\frac{5}{3}, \frac{3}{5}$

C. -12, $\frac{1}{12}$

D. 3, 3

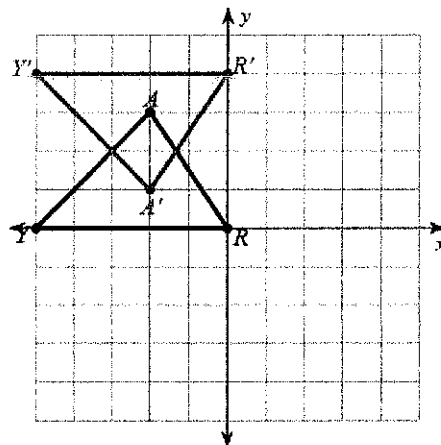
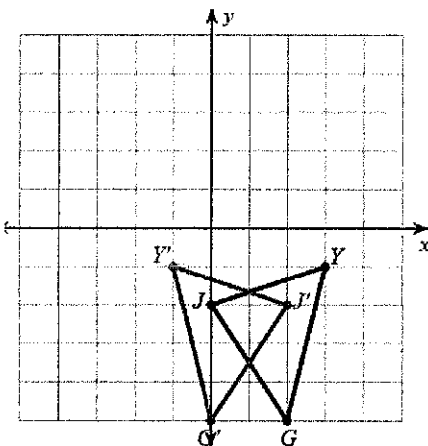
29. $x =$ _____ $y =$ _____



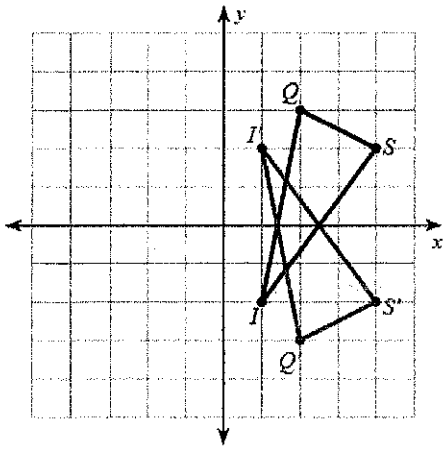
Name the reflection lines:

30. _____

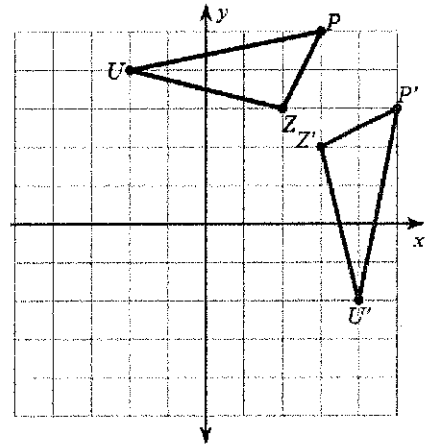
31. _____



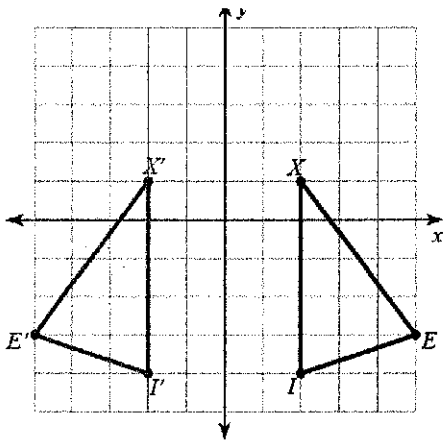
32. _____



33. _____

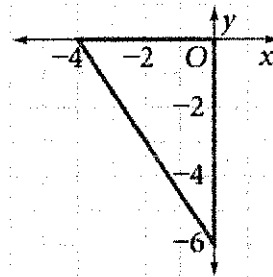


34. _____



35. _____

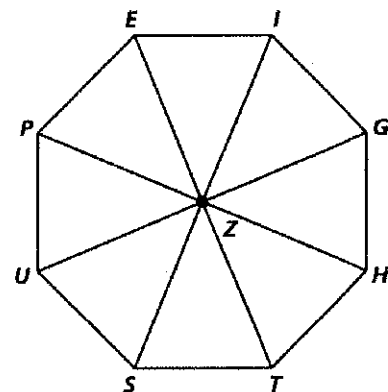
Find the circumcenter:



36.

.....
**Regular octagon *EIGHTSUP* is divided into eight congruent triangles.
 Find the image of each point or segment for the given rotation.**

1. 45° rotation of G about Z
2. 225° rotation of U about Z
3. 315° rotation of E about Z
4. 270° rotation of \overline{EI} about Z
5. 135° rotation of S about Z
6. 360° rotation of \overline{ST} about Z

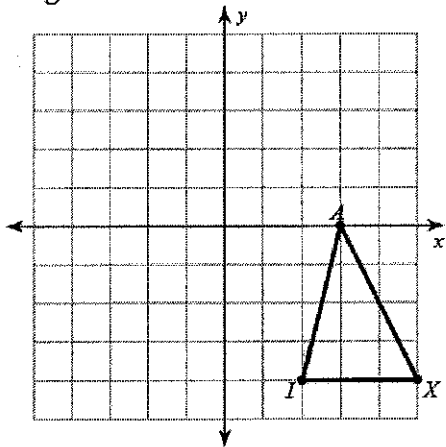


37.

	Number of sides	Number of lines of reflection (if shape is regular)	Angle of rotation
Pentagon			
Hexagon			
Octagon			

38.

rotation 90° counterclockwise about the origin



Problems that I got wrong to re-do/study further:

"Big Ideas" that I need to remember for the exam: