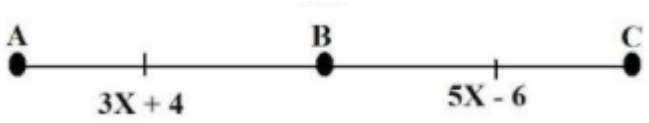
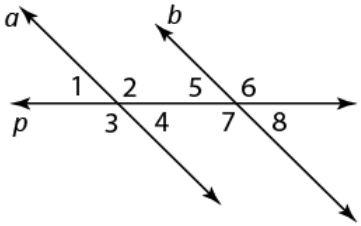
Geometry Common Assessment #3 Review **Name _____**

1. If $AC = 38$, what is the value of x?



2. Line p intersects lines a and b. If $a \parallel b$, by which theorem is $\angle 3 \cong \angle 6$?



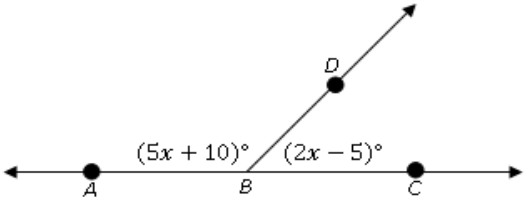
a. Alternate Exterior Angles Theorem
b. Alternate Interior Angles Theorem
c. Corresponding Exterior Angles Theorem

3. What is the hypothesis of the conditional statement: If two angles are vertical angles, then they are congruent.

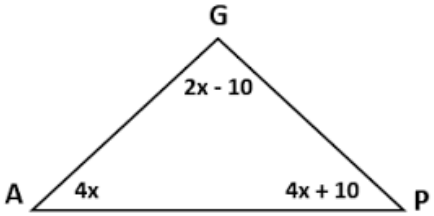
4. Fill in the blanks: Parallel lines are in the same _____, but they do not _____.

angle	translate
figure	intersect
plane	correspond
reflection	reflect

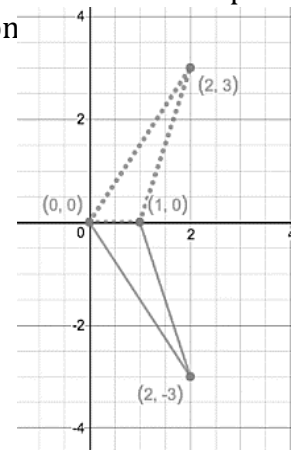
5. What is $m\angle ABD$?



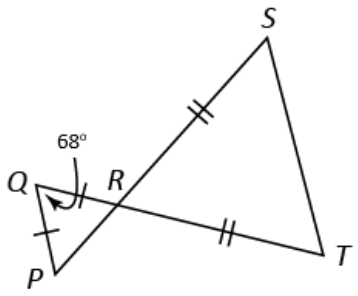
6. What is the value of x?



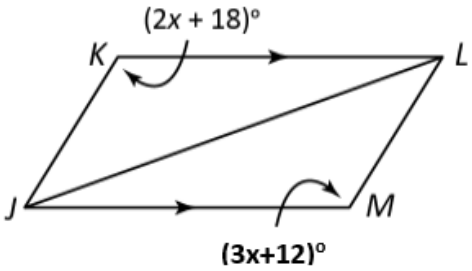
7. What rigid motion transformation maps the solid line figure on figure?
   a. Reflection
   b. Rotation
   c. Translation



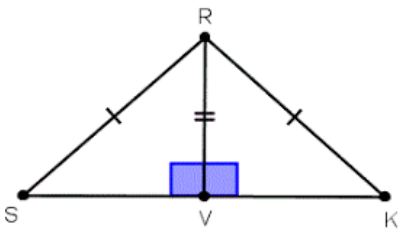
8. What is $m\angle QPR$?



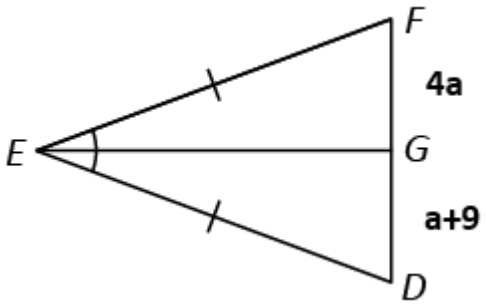
9. To show that $\Delta JKL \cong \Delta LMJ$ by AAS, what must be the value of x?



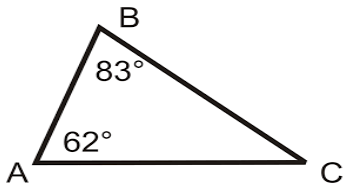
10. By which theorem can you conclude $\Delta VRS \cong \Delta VRK$?
    a. AAS
    b. SAS
    c. SSS
    d. HL



11. What is the length of DF? (Hint: Solve for a, then plug in to FG and DG)

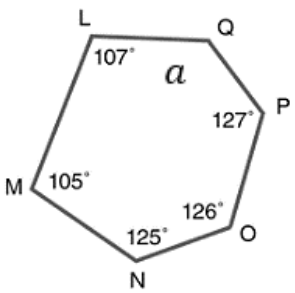


12. List the sides of ΔABC from SHORTEST to LONGEST. (Hint: Find $m\angle C$ first!)
    a. $\overline{AC}, \overline{BC}, \overline{AB}$
    b. $\overline{AB}, \overline{BC}, \overline{AC}$
    c. $\overline{BC}, \overline{AC}, \overline{AB}$
    d. $\overline{AB}, \overline{AC}, \overline{BC}$



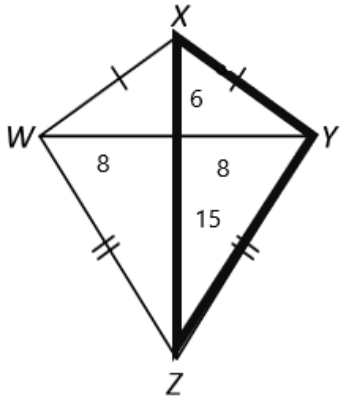
13. A triangle has two sides with lengths of 20cm and 42cm. Which best describes the length of the third side?
    a. Less than 22cm
    b. Greater than 62cm
    c. Less than 22cm or greater than 62cm
    d. Greater than 22cm and less than 62cm

14. What is the value of a? (Hint: First find the sum of the interior angles of the polygon.)

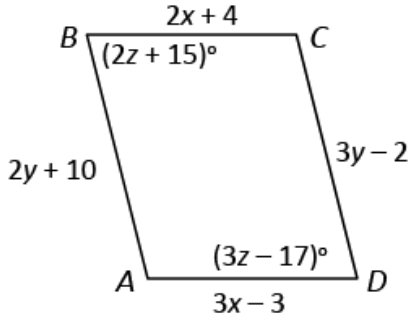


15. What is the measure of one interior angle of a regular 18-gon? (Hint: first find the sum of the interior angles.)

16. What is the perimeter of ΔXYZ?



17. What must the values of x and y be for $ABCD$ to be a parallelogram?



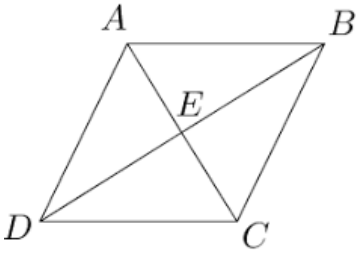
$x =$ _____; $y =$ _____

18. Which statements are properties of rectangles?

a.	Diagonals are perpendicular.	Yes	No
b.	Diagonals are congruent.	Yes	No
c.	Diagonals bisect opposite angles.	Yes	No
d.	All four sides are congruent.	Yes	No
e.	Opposite sides are congruent.	Yes	No

19. Which additional piece of information would show that $ABCD$ is a rhombus?

a. $\overline{AE} \cong \overline{EC}$
b. $\overline{AD} \parallel \overline{BC}$
c. $\overline{AC} \perp \overline{BD}$
d. $\overline{AB} \cong \overline{DC}$



20. Which is the most precise description of the quadrilateral?

a. Kite
b. Parallelogram
c. Rectangle
d. Rhombus