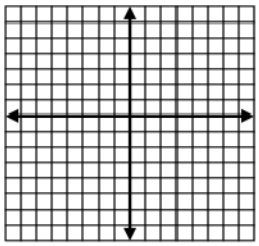
Geometry **Problem Set #16** **Name:**_____
1st Semester Period:_____

1. In slope-intercept form, write the equation of the line passing through (8, 0) (5, -3).

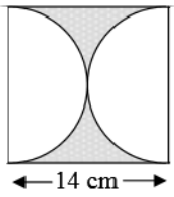
2. In point-slope form, Write the equation of a line parallel to $x + 2y = 14$ that passes through the point (-10,5).

3. Find the distance between the two points. Round to the nearest tenth, if necessary. (8, 4) (-7, -1)



4. If the area of a circle is $64\pi \ m^2$, find the circumference of the circle in terms of π .

5. Find the area of the shaded region. Round to the nearest tenth.



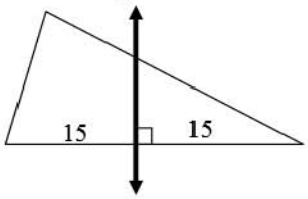
6. Write the inverse of: If people eat apples, then they are healthy.

7. Write the contrapositive of: If I drive carelessly, then I will get a ticket.

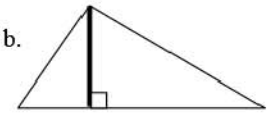
8. Find a counter-example to: If a number is bigger than 5, then the square of the number is at least 36.

9. Name each segment or line as an angle bisector, median, altitude, or perpendicular bisector.

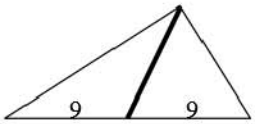
a.



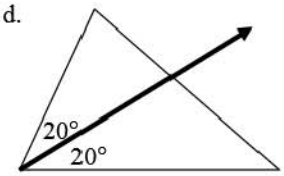
b.



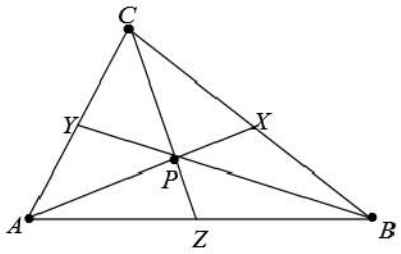
c.



d.



10. The three medians intersect in ΔABC at point P.



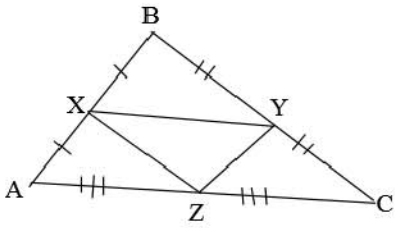
a. If $AC = 34$ cm, then $CY =$ _____.

b. If $PZ = 6$ cm, then $CP =$ _____.

c. If $BY = 99$ cm, then $PY =$ _____.

d. If the area of $\Delta PAZ = 11 cm^2$, then the area of $\Delta ABC =$ _____.

11.



a. $\overline{AB} \,//$ _____.

b. If $AC = 66$ in., then $XY =$ _____.

c. If $YC = 23$ in., then $XZ =$ _____.

d. If $AX = 14$ in., then $BX =$ _____.

e. Use the information from parts b through d to find the Perimeter of ΔXYZ.