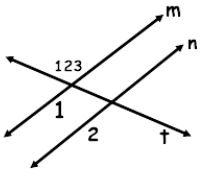
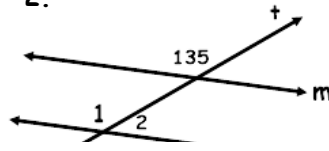


For problems 1-4, find the measures of $\angle 1$ and $\angle 2$. Lines m and n are parallel.

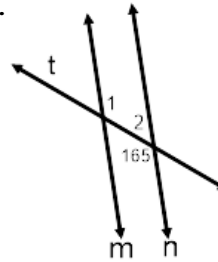
1.



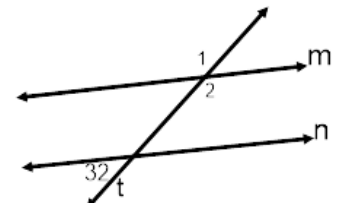
2.



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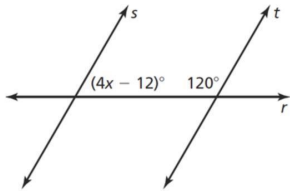


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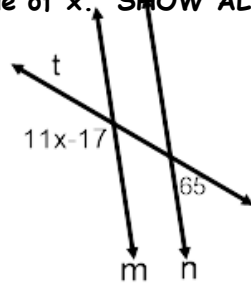


For problems 5-8, find the value of x . **SHOW ALL WORK!**

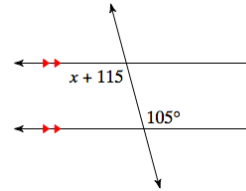
5.



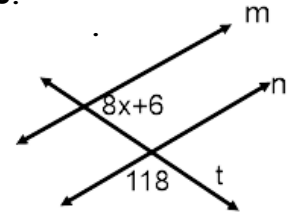
6.



7.



8.



9. Write the reasons for the algebraic proof.

$$3x+5= 3(x+1) -10x$$

$$3x+5= 3(x) +3(1) - 10x$$

$$3x+5 = -7x + 3$$

$$3x+5+7x = -7x+3+7x$$

$$10x+5=3$$

$$10x+5-5=3-5$$

$$10x=-2$$

$$10x/10=-2/10$$

$$X=-1/5$$

10. Write the area formulas for the following figures:

Parallelogram

Rectangle

Triangle

Square

Circle

Trapezoid

11. If a circle has an area of 452.3893 square inches, find the circumference of the circle. Hint: start with the area formula. **THERE SHOULD BE WORK SHOWN FOR THIS PROBLEM TO RECEIVE CREDIT!**

12. Two noncoplanar lines that don't intersect are called _____.

13. A line that intersects the circle at two points is called a _____.

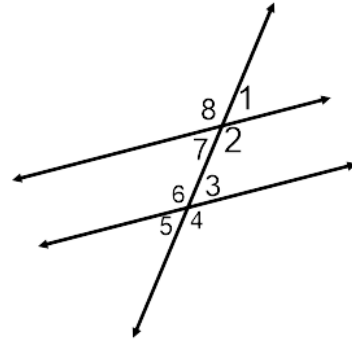
14. A _____ is a segment with one endpoint at the center of the circle and the other endpoint on the circle.

15. A _____ is a segment with both endpoints on the circle and contains the center.

16. Two coplanar lines that don't intersect are called _____.

17. Write the name for the following pairs of angles:

- a. $\angle 5$ & $\angle 7$
- b. $\angle 4$ & $\angle 8$
- c. $\angle 3$ & $\angle 5$
- d. $\angle 2$ & $\angle 3$
- e. $\angle 2$ & $\angle 6$



18. Find the distance between $J(10, -3)$ and $K(-6, 4)$ WRITE THE FORMULA AND SHOW WORK!

19. Find the total degrees in the interior of a polygon with 32 sides. WRITE THE FORMULA!

20. Write the definition of a regular polygon.

21.

- a. What is a polygon with 5 sides called? _____
- b. What is a polygon with 7 sides called? _____
- c. What is a polygon with 11 sides called? _____
- d. What is a polygon with 10 sides called? _____

22. Factor and SOLVE $x^2 + 13x + 12 = 0$