

1. Find the sum of the interior angles of a convex decagon.

3. Find the measure of each interior angle of a regular 16-gon.

2. Find the sum of the exterior angles of a convex pentagon.

4. Find the measure of each exterior angle of a regular nonagon.

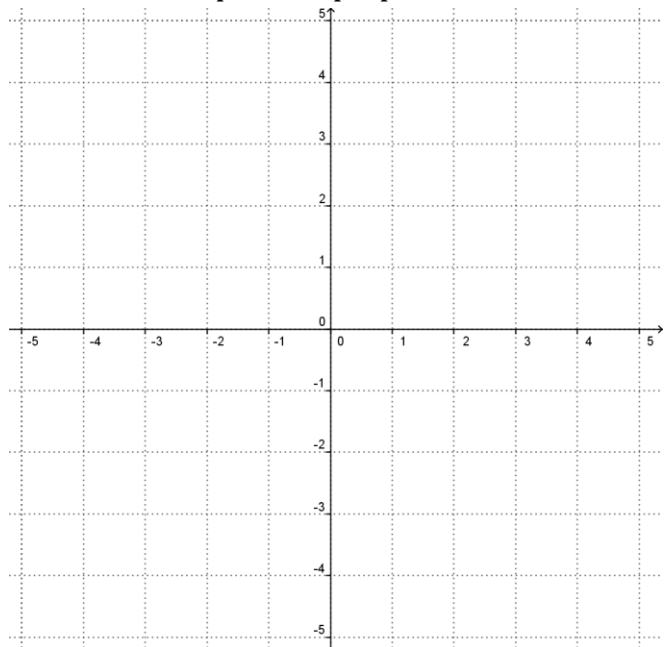
5. Find the slope of each line. Classify each pair of lines as either parallel, perpendicular, or neither parallel nor perpendicular.

Line 1: $(-3, -1)$ and $(3, 3)$

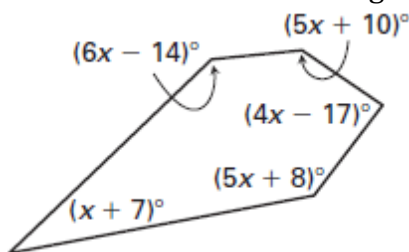
Line 2: $(-2, 2)$ and $(0, -1)$

Line 3: $(0, 4)$ and $(2, 1)$

Line 4: $(-3, -4)$ and $(1, -1)$

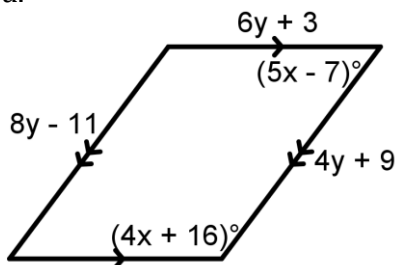


6. Solve for x in the diagram.

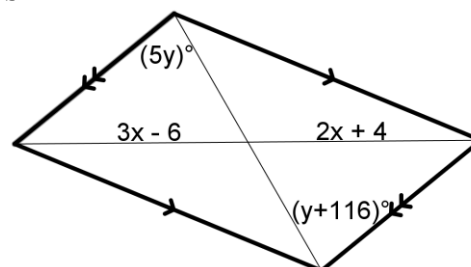


7. Solve for the variables in the diagram.

a.

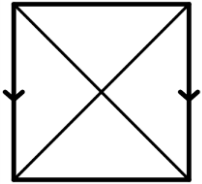


b.

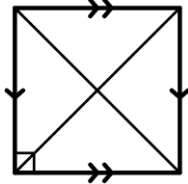


8. Determine the most specific classification that can be used for the given quadrilateral based only upon the markings.

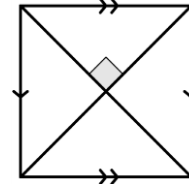
a.



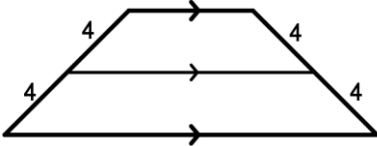
b.



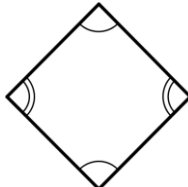
c.



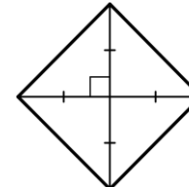
d.



e.

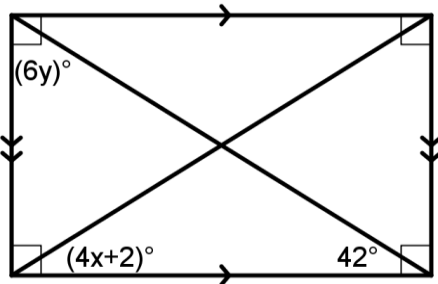


f.

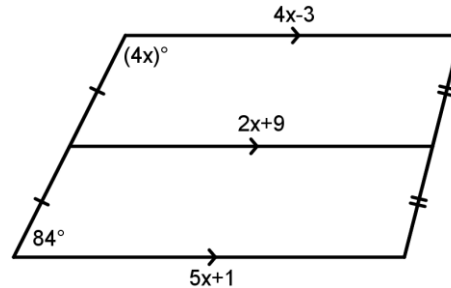


9. Solve for the variables in the diagrams.

a.

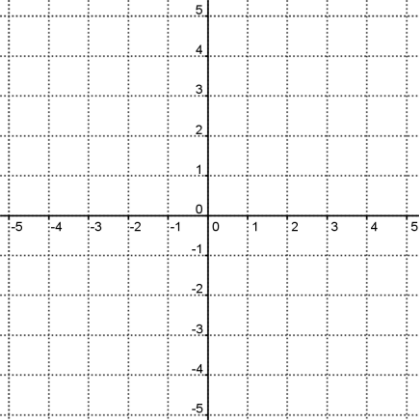


b.

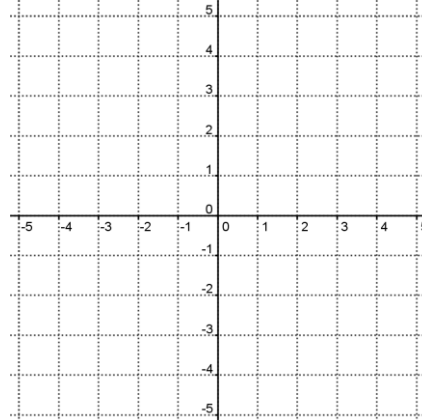


10. Graph the four points, then determine the most specific classification for the quadrilateral. Explain your reasoning.

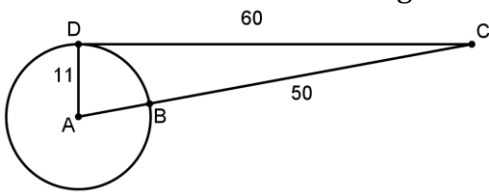
a. $A=(-4, 1)$, $B=(-1, 3)$, $C=(3, -3)$, $D=(0, -5)$



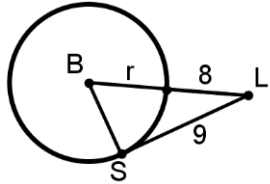
b. $E=(-2, 3)$, $F=(-5, -3)$, $G=(1, -2)$, $H=(4, 4)$



11. Determine if \overline{CD} is tangent to $\odot A$. Explain your reasoning.



12. Determine the radius of $\odot B$ if \overline{SL} is tangent.

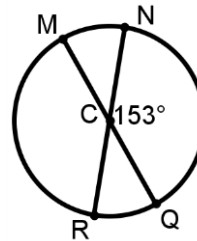


13. Determine the following measures of $\odot C$:

a. $m\widehat{RQ} =$ _____

b. $m\widehat{MNQ} =$ _____

c. $m\widehat{RMQ} =$ _____

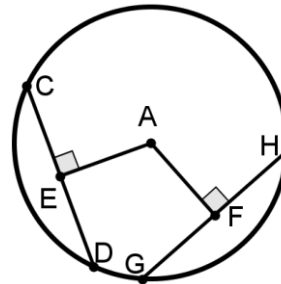


14. In $\odot A$ $\overline{CD} \cong \overline{HG}$, $FG = 10$, $AF = 2x$, $AE = 8$, and $CD = 6x - 4$. Use this information to find the following values:

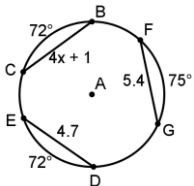
a. $x =$ _____

b. $AF =$ _____

c. $HG =$ _____



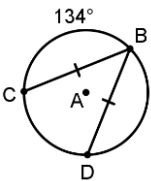
15. Write an equation and solve for x . Explain your reasoning in setting up the equation.



16. Determine the following measures in $\odot A$:

$m\widehat{BD} =$ _____

$m\widehat{CD} =$ _____

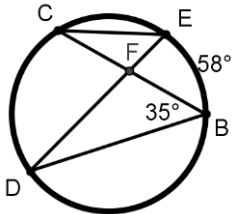


For questions 17-20 find the measure of each angle or arc.

17. a. $m\angle ECB =$ _____

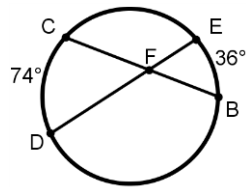
b. $m\angle CED =$ _____

c. $m\widehat{CD} =$ _____



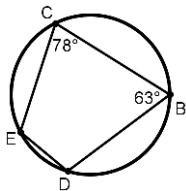
18. a. $m\angle CFD =$ _____

b. $m\angle EFC =$ _____

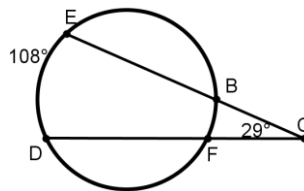


19. a. $m\angle CED =$ _____

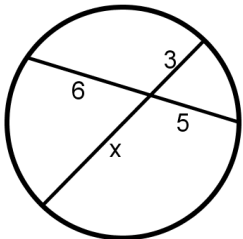
b. $m\widehat{EB} =$ _____



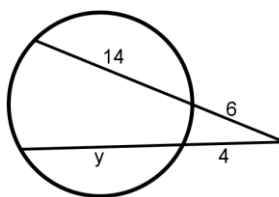
20. $m\widehat{BF} =$ _____



21. Solve for x .



22. Solve for y .



23. Solve for x .

