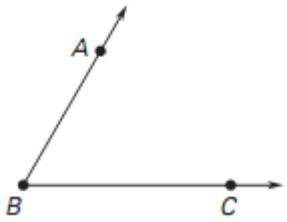
Geometry: Review 1.4-1.6

Name_____

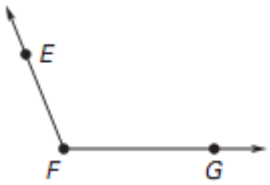
Give three different names for the angles below. Then name the vertex and the sides of the angle.

1. 

Names (3):

Vertex:

Sides:

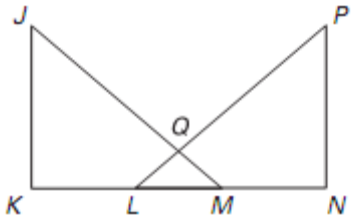
2. 

Names (3):

Vertex:

Sides:

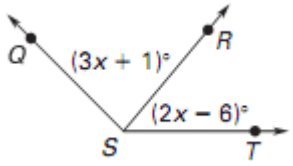
Give another name for the angle in the diagram. Tell whether the angle appears to be *acute, obtuse, right,* or *straight*.



3. $\angle KMN$ 4. $\angle JML$ 5. $\angle PLK$

Use the given information to find the indicated angle measure.

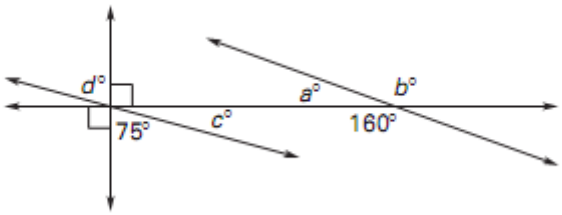
6. Given $m\angle QST = 135°$, find $m\angle QSR$.



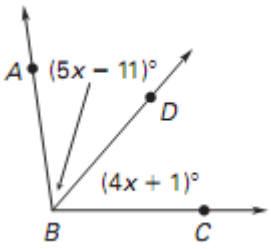
$m\angle QSR =$ _____

Find the indicated angle measure.

7. $b°$ 8. $d°$



In the diagram, $\overrightarrow{BD}$ bisects $\angle ABC$. Find $m\angle ABC$.

9. 

$m\angle ABC =$ _____

$\angle 1$ and $\angle 2$ are complementary angles and $\angle 2$ and $\angle 3$ are supplementary angles. Given the measure of $\angle 1$, find $m\angle 2$ and $m\angle 3$.

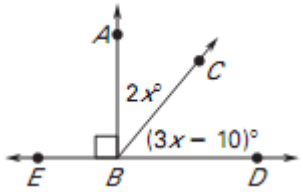
10. $m\angle 1 = 80°$

$m\angle 2 =$ _____ $m\angle 3 =$ _____

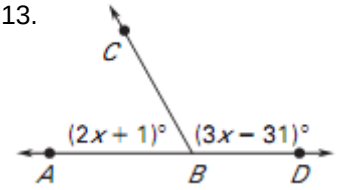
11. $m\angle 1 = 72°$

$m\angle 2 =$ _____ $m\angle 3 =$ _____

Find $m\angle ABC$ and $m\angle CBD$.

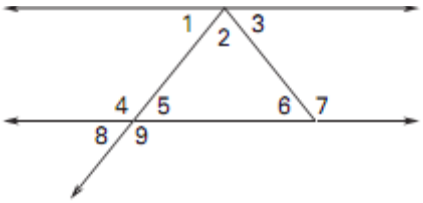
12. 

$m\angle ABC =$ _____ $m\angle CBD =$ _____

13. 

$m\angle ABC =$ _____ $m\angle CBD =$ _____

In Exercises 8–12, use the diagram. Tell whether the angles are *vertical angles*, a *linear pair*, or *neither*.



14. $\angle 2$ and $\angle 3$

15. $\angle 5$ and $\angle 8$

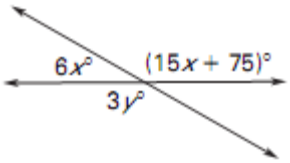
16. The measure of one angle is three times the measure of its complement. Find the measure of each angle.

$m\angle 1 =$ _____ $m\angle 2 =$ _____

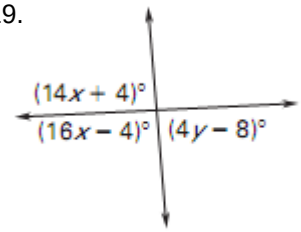
17. The measure of one angle is 38° less than the measure of its supplement. Find the measure of each angle.

$m\angle 1 =$ _____ $m\angle 2 =$ _____

Find the values of x and y.

18. 

$x =$ _____ $y =$ _____

19. 

$x =$ _____ $y =$ _____

$\angle A$ and $\angle B$ are complementary angles. Find $m\angle A$ and $m\angle B$.

21. $m\angle A = x°$

$m\angle B = (2x - 75)°$

$m\angle A =$ _____ $m\angle B =$ _____

22. $m\angle A = (4x - 18)°$

$m\angle B = (6x - 18)°$

$m\angle A =$ _____ $m\angle B =$ _____

$\angle A$ and $\angle B$ are supplementary angles. Find $m\angle A$ and $m\angle B$.

23. $m\angle A = (x + 50)°$

$m\angle B = (x + 100)°$

$m\angle A =$ _____ $m\angle B =$ _____

24. $m\angle A = (2x + 3)°$

$m\angle B = (3x - 223)°$

$m\angle A =$ _____ $m\angle B =$ _____

Tell whether the figure is a polygon. If it is not, explain why. If it is a polygon, tell whether it is *convex* or *concave*

25. 

Polygon? _____

_____

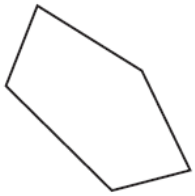
_____

26. 

Polygon? _____

_____

_____

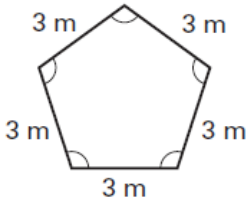
27. 

Polygon? _____

_____

_____

Classify the polygon by the number of sides. Tell whether the polygon is *equilateral, equiangular,* or *regular.* Explain your reasoning

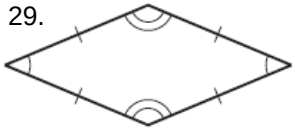
28. 

Classifiy: _____

Polygon is _____

_____

_____

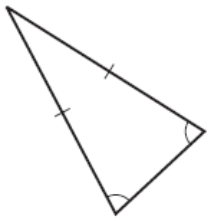
29. 

Classifiy: _____

Polygon is _____

_____

_____

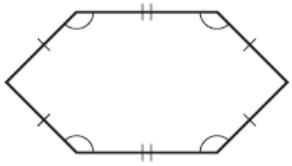
30. 

Classifiy: _____

Polygon is _____

_____

_____

31. 

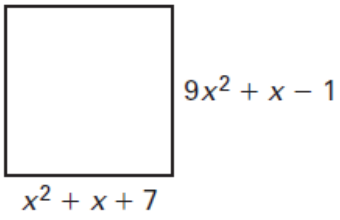
Classifiy: _____

Polygon is _____

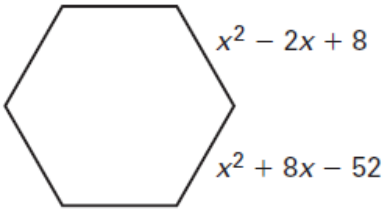
_____

_____

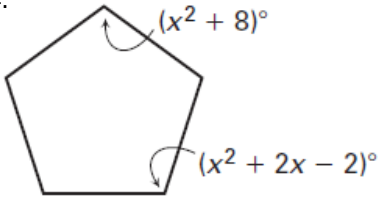
Each figure is a <u>regular</u> polygon. Find the length of each side or the measure of each interior angle (depending on the given information).

32. 

side length = _____

33. 

side length = _____

34. 

angle measure = _____