

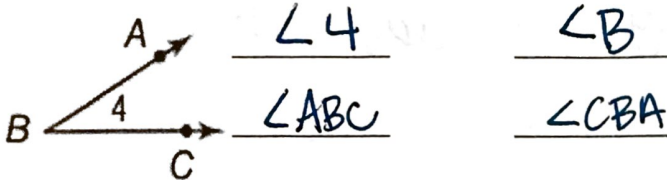
HW 5-1 Classifying Angles and Triangles

Int 1

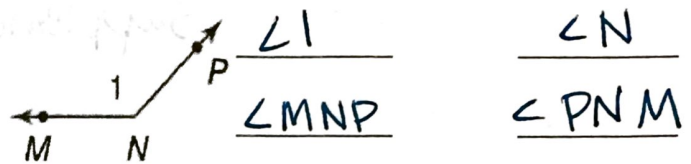
Unit 5

Name each given angle in FOUR different ways. Then, classify the angle as **acute**, **right**, **obtuse** or **straight**.

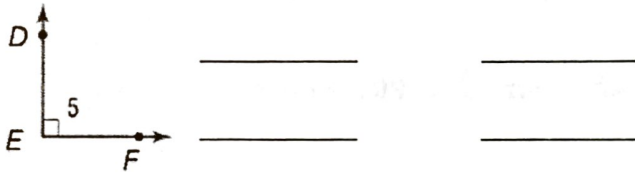
1. This is a(n) acute angle.
Four ways to name this angle:



3. This is a(n) Obtuse angle.
Four ways to name this angle:



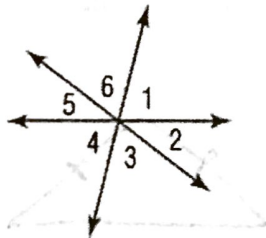
2. This is a(n) _____ angle.
Four ways to name this angle:



4. This is a(n) _____ angle.
Four ways to name this angle:



Refer to the diagram below. Identify each angle pair as **adjacent**, **vertical**, or **neither**.



6. $\angle 5$ and $\angle 6$

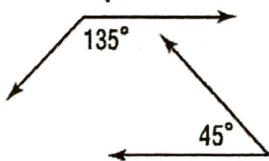
7. $\angle 1$ and $\angle 3$

8. $\angle 2$ and $\angle 5$

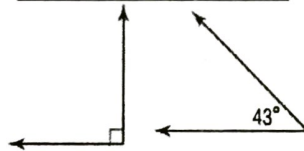
Neither

Identify each pair of angles as **complementary**, **supplementary**, or **neither**.

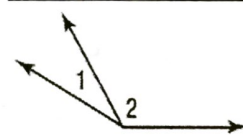
9. Supplementary



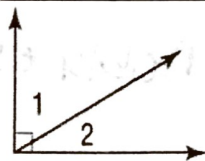
11. _____



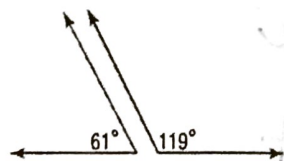
13. Neither



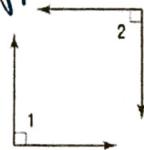
10. _____



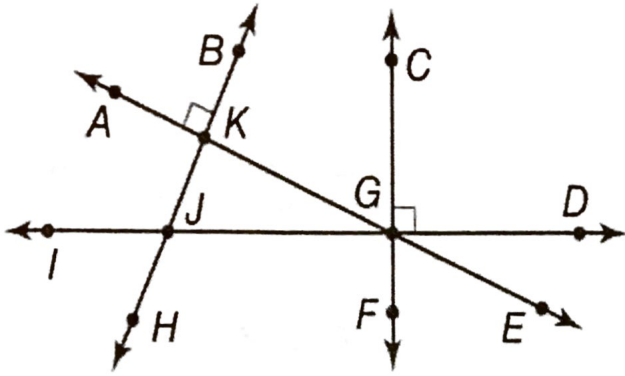
12. _____



14. Supplementary



Use the diagram to answer the questions that follow.



a) Identify each pair of angles as:

- complementary
- supplementary
- neither

b) Identify each pair of angles as:

- adjacent
- vertical
- neither

15. $\angle IJK$ and $\angle KJG$ a) Supplementary b) adjacent

16. $\angle DGE$ and $\angle CGK$ a) _____ b) _____

17. $\angle AKB$ and $\angle JKG$ a) Supplementary b) vertical

Draw a triangle that satisfies each set of conditions. Then classify the triangle. Please use a ruler to help you measure and draw straight lines.

18) A triangle with three acute angles and 2 congruent sides.

19) A triangle with one right angle and no congruent sides.

20) A triangle with three acute angles and no congruent sides

21) A triangle with one obtuse angle and two congruent sides.



Classify by sides:

_____ scalene

_____ isosceles

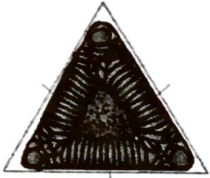
Classify by angles:

_____ right

_____ obtuse

Classify each of the marked triangles by angles and by sides.

23)



By angles: acute

By side: equilateral

26)



By angles: _____

By side: _____

24)



By angles: _____

By side: _____

27)



By angles: obtuse

By side: isosceles

25)



By angles: obtuse

By side: isosceles

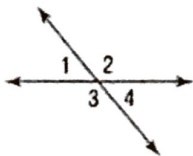
28)



By angles: _____

By side: _____

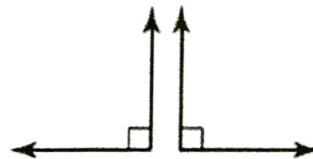
28) Which statement is true?



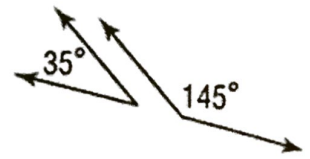
- (A) $\angle 1$ and $\angle 4$ are adjacent angles.
- (B) $\angle 2$ and $\angle 3$ are vertical angles.
- (C) $\angle 3$ and $\angle 4$ are vertical angles.
- (D) $\angle 2$ and $\angle 3$ are adjacent angles.

29) Which angle pairs are not supplementary?

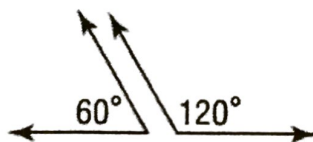
(A)



(C)



(B)



(D)

