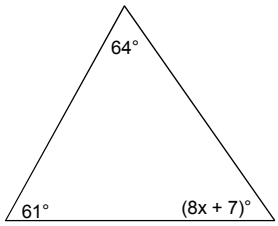
Pre-Algebra 3rd 9-Week Exam (Study Guide) 2013-2014

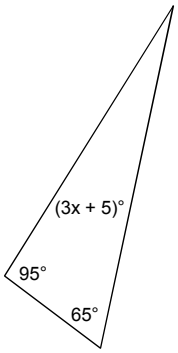
Find the value of x.

1)



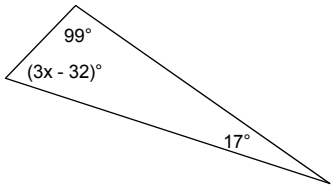
A) 7 B) 0
C) 1 D) 6

2)



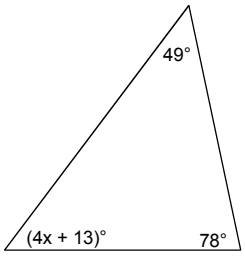
A) 4 B) 2
C) 5 D) 8

3)



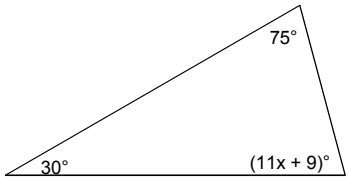
A) 32 B) 31
C) 36 D) 41

4)



A) 18 B) 16
C) 10 D) 26

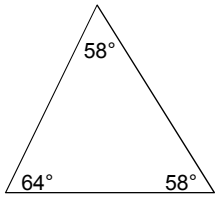
5)



A) 13 B) 6
C) 14 D) 8

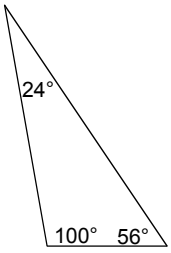
Classify each triangle by its sides.

6)



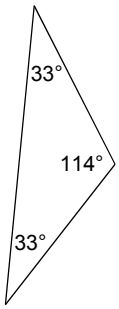
A) equilateral B) scalene
C) right D) isosceles

7)



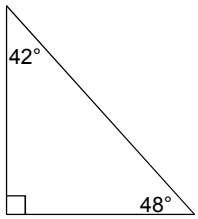
A) right B) scalene
C) equilateral D) isosceles

8)



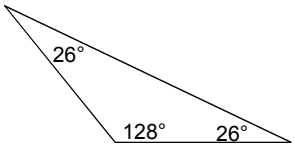
A) scalene B) equilateral
C) right D) isosceles

9)



A) right B) isosceles
C) scalene D) equilateral

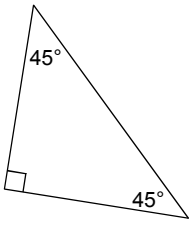
10)



A) right B) equilateral
C) isosceles D) scalene

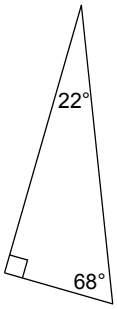
Classify each triangle by its angles.

11)



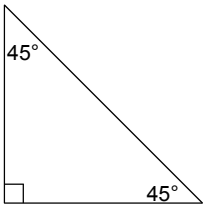
A) obtuse B) acute
C) scalene D) right

12)



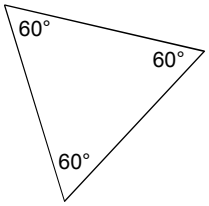
A) acute B) right
C) scalene D) obtuse

13)



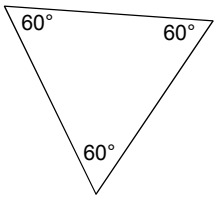
A) right B) acute
C) obtuse D) scalene

14)



A) scalene B) right
C) acute D) obtuse

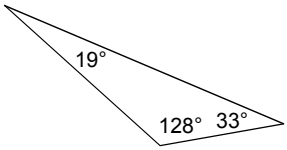
15)



A) right B) obtuse
C) acute D) scalene

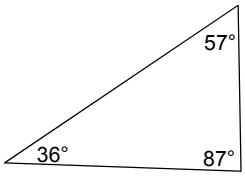
Classify each triangle by its angles and sides.

16)



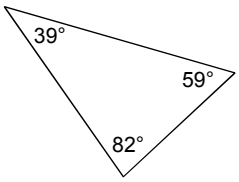
A) acute isosceles
B) acute scalene
C) obtuse scalene
D) right scalene

17)



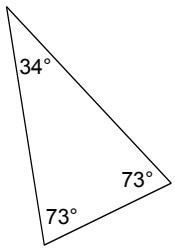
A) obtuse scalene
B) right isosceles
C) equilateral
D) acute scalene

18)



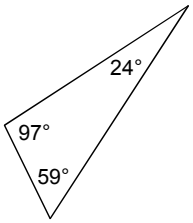
A) obtuse scalene
B) acute isosceles
C) equilateral
D) acute scalene

19)



A) right isosceles
B) right scalene
C) equilateral
D) acute isosceles

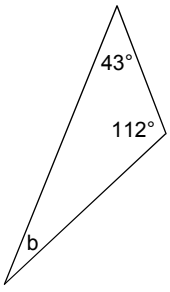
20)



A) obtuse scalene
B) right scalene
C) equilateral
D) obtuse isosceles

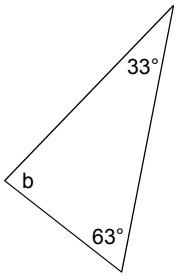
Find the measure of angle b.

21)



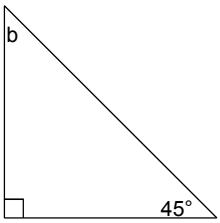
A) 29° B) 25°
C) 24° D) 34°

22)



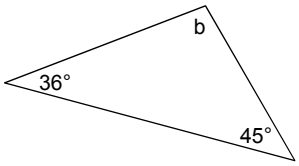
A) 84° B) 76°
C) 73° D) 81°

23)



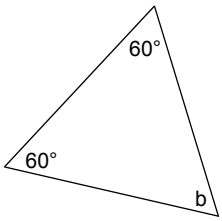
A) 52° B) 45°
C) 62° D) 53°

24)



A) 89° B) 94°
C) 99° D) 106°

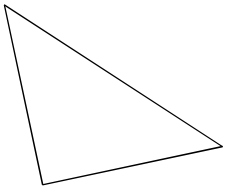
25)



A) 65° B) 75°
C) 60° D) 70°

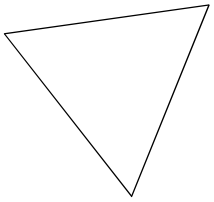
Classify each triangle by its sides.

26)



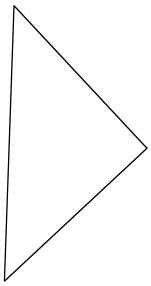
A) right B) scalene
C) isosceles D) equilateral

27)



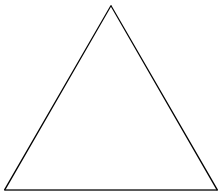
A) isosceles B) right
C) scalene D) equilateral

28)



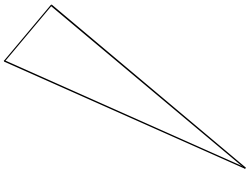
A) scalene B) right
C) isosceles D) equilateral

29)



A) equilateral B) scalene
C) isosceles D) right

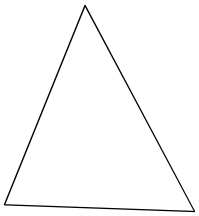
30)



A) equilateral B) right
C) scalene D) isosceles

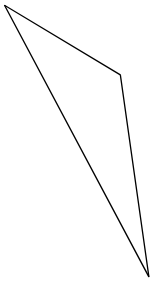
Classify each triangle by its angles.

31)



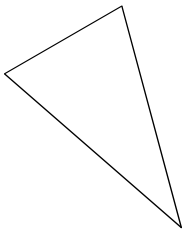
A) acute B) right
C) scalene D) obtuse

32)



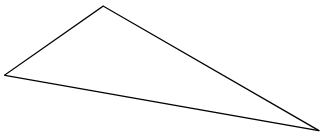
A) scalene B) right
C) obtuse D) acute

33)



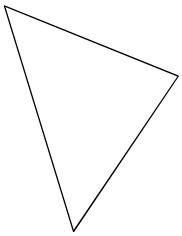
A) scalene B) right
C) obtuse D) acute

34)



A) obtuse B) acute
C) scalene D) right

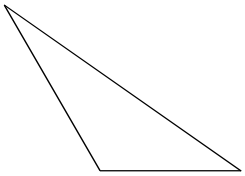
35)



A) right B) scalene
C) obtuse D) acute

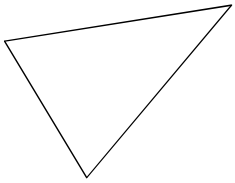
Classify each triangle by its angles and sides.

36)



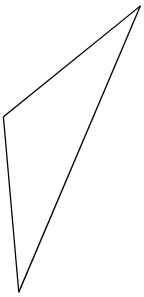
A) right isosceles
B) obtuse isosceles
C) right scalene
D) obtuse scalene

37)



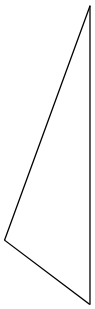
A) right scalene
B) equilateral
C) acute scalene
D) obtuse isosceles

38)



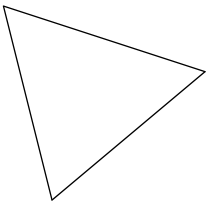
A) acute scalene
B) obtuse isosceles
C) acute isosceles
D) right scalene

39)



A) obtuse scalene
B) obtuse isosceles
C) equilateral
D) right scalene

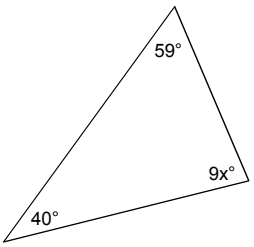
40)



A) right isosceles
B) acute scalene
C) obtuse isosceles
D) acute isosceles

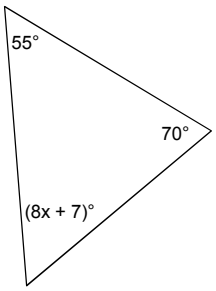
Find the value of x.

41)



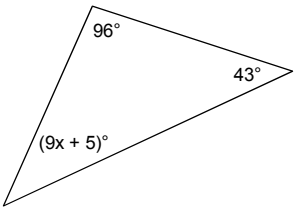
A) 0 B) 2
C) 5 D) 9

42)



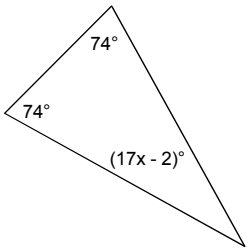
A) 16 B) 6
C) 1 D) 11

43)



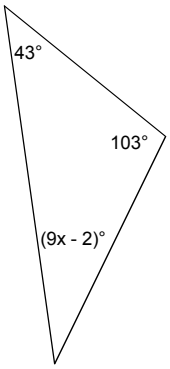
A) 4 B) 13
C) 22 D) 27

44)



A) 2 B) 17
C) 4 D) 7

45)



A) 22 B) 32
C) 13 D) 4

Find each missing length to the nearest tenth.

46) *a = 12.2, b = 10.3, c = ?*

A) 17.8 B) 18.1
C) 16 D) 256

47) *a = 12.9, b = 13.3, c = ?*

A) 26.2 B) 18.5
C) 342.3 D) 16.7

48) *a = 3, b = ?, c = 3.3*

A) 0.1 B) 1.4
C) 0.3 D) 2

49) *a = ?, b = 8.1, c = 12*

A) 6.2 B) 79.2
C) 3.9 D) 8.9

50) *a = ?, b = 6.2, c = 11.1*

A) 12.2 B) 9.2
C) 4.9 D) 84.6

Do the following lengths form a right triangle?

51) *a = 3.3, b = 5.6, c = 6*

A) Yes B) No

52) *a = 3.2, b = 6, c = 6.8*

A) Yes B) No

53) *a = 3.6, b = 10.5, c = 11.1*

A) No B) Yes

54) *a = 7.2, b = 9.6, c = 12*

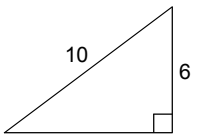
A) Yes B) No

55) *a = 4.4, b = 11.7, c = 12.5*

A) Yes B) No

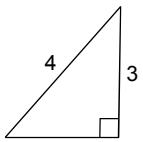
Find each missing length to the nearest tenth.

56)



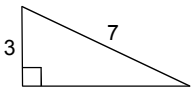
A) 34.8 B) 8
C) 64 D) 4

57)



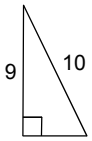
A) 2.6 B) 6.8
C) 2.9 D) 4.1

58)



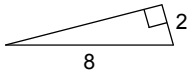
A) 15.2 B) 6.3
C) 39.7 D) 4

59)



A) 19.4 B) 1
C) 4.4 D) 7.4

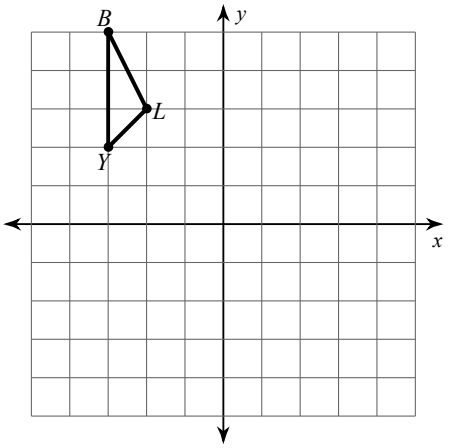
60)



A) 59.3 B) 8
C) 7.7 D) 6

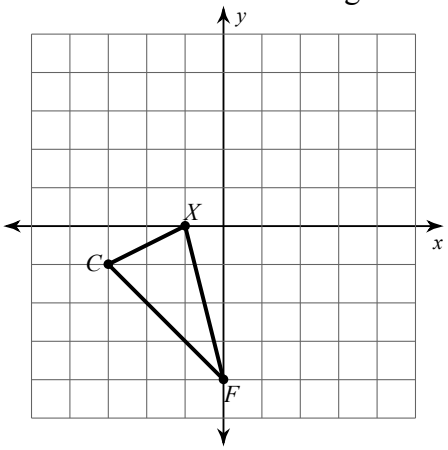
Find the coordinates of the vertices of each figure after the given transformation.

61) rotation 90° clockwise about the origin



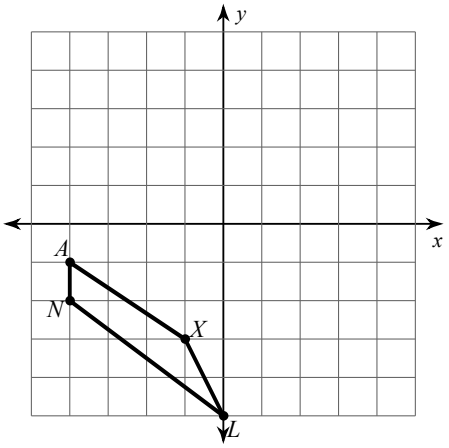
A) $Y'(-2, -3), B'(-5, -3), L'(-3, -2)$
B) $Y'(-1, -3), B'(-1, 0), L'(0, -2)$
C) $Y'(3, -2), B'(3, -5), L'(2, -3)$
D) $Y'(2, 3), B'(5, 3), L'(3, 2)$

62) rotation 180° about the origin



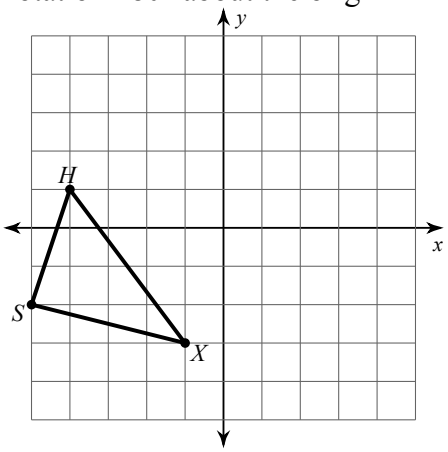
A) $C'(-1, 3), X'(0, 1), F'(-4, 0)$
B) $C'(3, 1), X'(1, 0), F'(0, 4)$
C) $C'(1, -3), X'(0, -1), F'(4, 0)$
D) $X'(-3, 0), F'(-4, -4), C'(-1, -1)$

63) rotation 90° clockwise about the origin



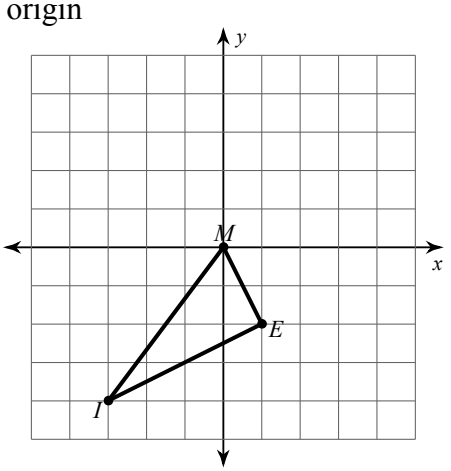
A) $N'(-5, 0), A'(-5, 1), X'(-2, -1), L'(-1, -3)$
B) $N'(-2, 4), A'(-1, 4), X'(-3, 1), L'(-5, 0)$
C) $N'(2, -4), A'(1, -4), X'(3, -1), L'(5, 0)$
D) $N'(4, 2), A'(4, 1), X'(1, 3), L'(0, 5)$

64) rotation 180° about the origin



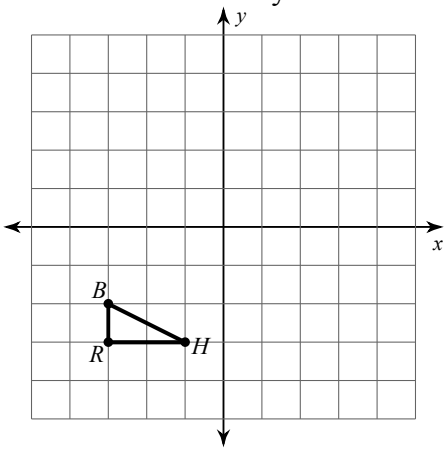
A) $S'(5, 2), H'(4, -1), X'(1, 3)$
B) $S'(-2, 5), H'(1, 4), X'(-3, 1)$
C) $S'(2, -5), H'(-1, -4), X'(3, -1)$
D) $H'(4, 1), X'(1, -3), S'(5, -2)$

65) rotation 90° counterclockwise about the origin



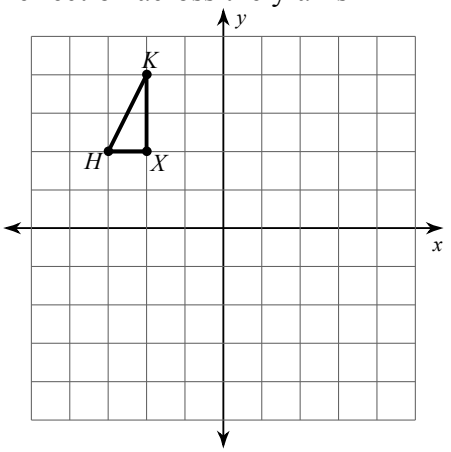
A) $I'(-3, 1), M'(0, 5), E'(1, 3)$
B) $I'(3, 4), M'(0, 0), E'(-1, 2)$
C) $I'(4, -3), M'(0, 0), E'(2, 1)$
D) $I'(-4, 3), M'(0, 0), E'(-2, -1)$

66) reflection across the y-axis



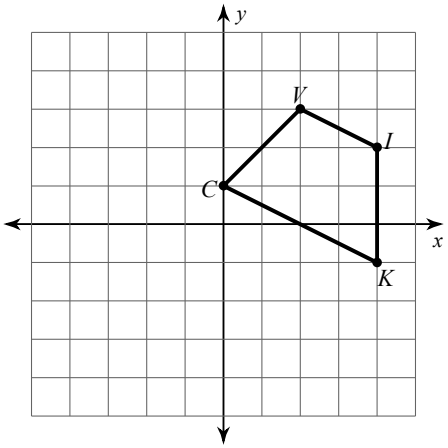
A) $B'(-3, 2), H'(-1, 3), R'(-3, 3)$
B) $B'(3, -2), H'(1, -3), R'(3, -3)$
C) $R'(3, -4), B'(3, -3), H'(5, -4)$
D) $R'(3, 3), B'(3, 2), H'(1, 3)$

67) reflection across the y-axis



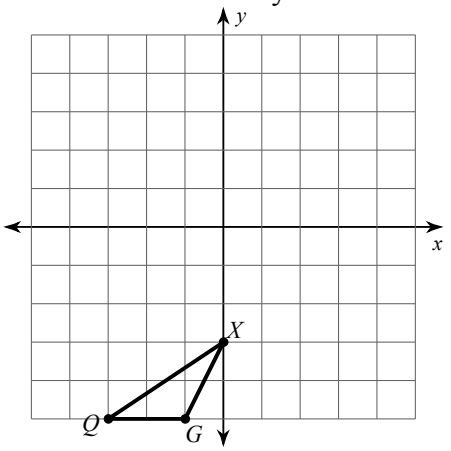
A) $H'(-4, -5), K'(-3, -3), X'(-3, -5)$
B) $H'(-5, 1), K'(-4, 3), X'(-4, 1)$
C) $K'(2, 4), X'(2, 2), H'(3, 2)$
D) $K'(-2, -4), X'(-2, -2), H'(-3, -2)$

68) reflection across the x-axis



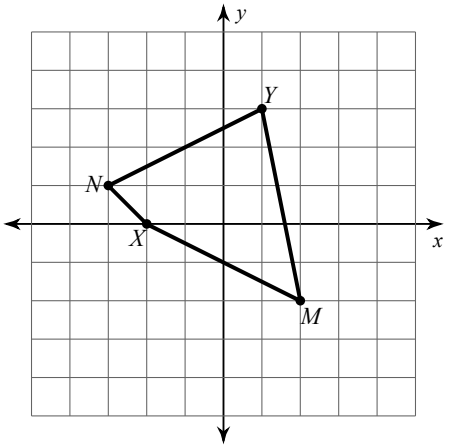
A) $C'(0, -1), V'(-2, -3), I'(-4, -2), K'(-4, 1)$
B) $V'(2, -3), I'(4, -2), K'(4, 1), C'(0, -1)$
C) $C'(-1, 0), V'(-3, 2), I'(-2, 4), K'(1, 4)$
D) $V'(-2, 3), I'(-4, 2), K'(-4, -1), C'(0, 1)$

69) reflection across the y-axis



A) $Q'(3, 5), X'(0, 3), G'(1, 5)$
B) $Q'(5, -3), X'(3, 0), G'(5, -1)$
C) $X'(0, 3), G'(-1, 5), Q'(-3, 5)$
D) $X'(0, -3), G'(1, -5), Q'(3, -5)$

70) reflection across the x-axis



A) $N'(-3, -1), Y'(1, -3), M'(2, 2), X'(-2, 0)$
B) $X'(0, -2), N'(-1, -3), Y'(-3, 1), M'(2, 2)$
C) $X'(2, 0), N'(3, -1), Y'(-1, -3), M'(-2, 2)$
D) $N'(3, 1), Y'(-1, 3), M'(-2, -2), X'(2, 0)$

Find the distance between each pair of points.

71) $(-3, -6), (-6, 8)$

A) 4.123 B) 14.318
C) 9.22 D) 8.775

72) $(3, 2), (-4, -2)$

A) 3.317 B) 8.062
C) 1.732 D) 1

73) $(0, -2), (-1, -1)$

A) 2.828 B) 13.038
C) 1.414 D) 3.162

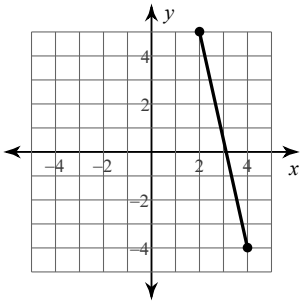
74) $(-7, -2), (-3, 8)$

A) 3.742 B) 4
C) 10.77 D) 11.662

75) $(7, -6), (-8, -8)$

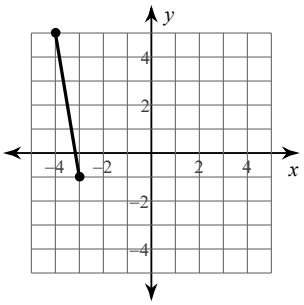
A) 4.123 B) 3.606
C) 13.964 D) 15.133

76)



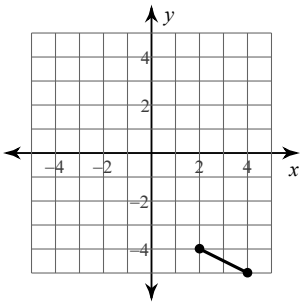
A) 3.317 B) 9.22
C) 6.083 D) 8.246

77)



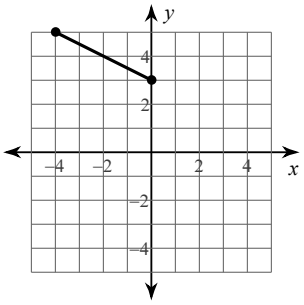
A) 2.646 B) 5.745
C) 6.083 D) 3.317

78)



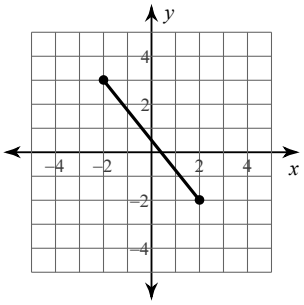
A) 3.873 B) 2.236
C) 1.732 D) 10.817

79)



A) 4.472 B) 2.449
C) 3.464 D) 8.944

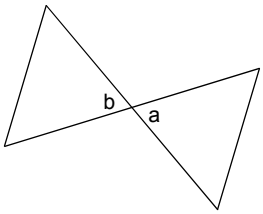
80)



A) 6.403 B) 7
C) 1 D) 3

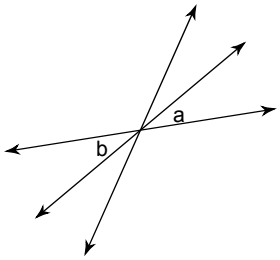
Name the relationship: complementary, supplementary, vertical, adjacent, alternate interior, corresponding, or alternate exterior.

81)



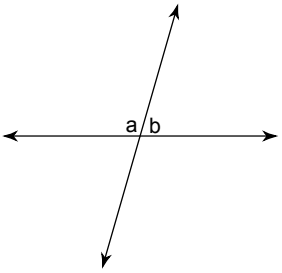
A) alternate exterior
B) alternate interior
C) adjacent
D) vertical

82)



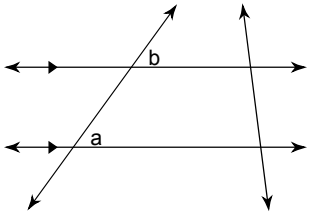
A) adjacent
B) vertical
C) complementary
D) alternate interior

83)



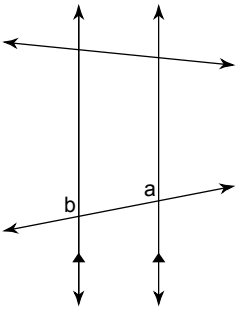
A) corresponding
B) alternate interior
C) supplementary
D) complementary

84)



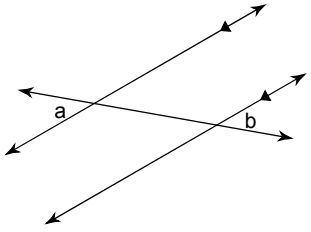
A) vertical
B) alternate exterior
C) corresponding
D) supplementary

85)



A) adjacent B) corresponding
C) vertical D) supplementary

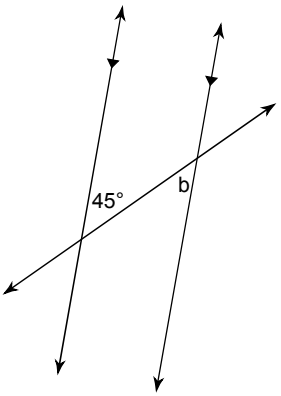
86)



A) adjacent
B) complementary
C) alternate exterior
D) vertical

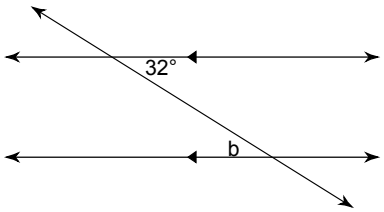
Find the measure of angle b.

87)



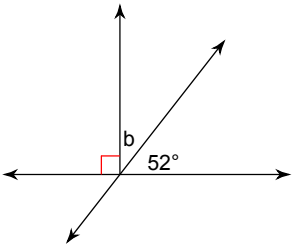
A) 79° B) 135°
C) 60° D) 45°

88)



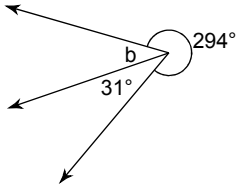
A) 65° B) 32°
C) 148° D) 25°

89)



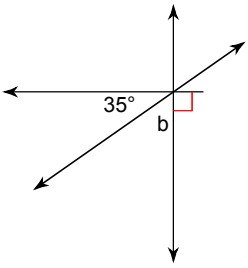
A) 142° B) 128°
C) 38° D) 52°

90)



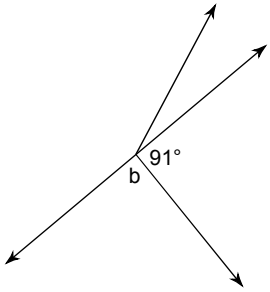
A) 96° B) 136°
C) 35° D) 134°

91)



A) 55° B) 125°
C) 32° D) 35°

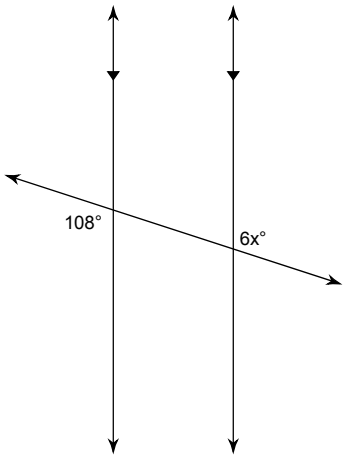
92)



A) 89° B) 83°
C) 1° D) 97°

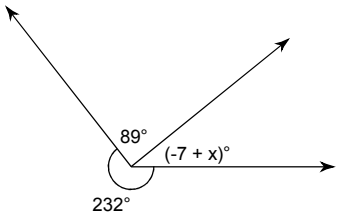
Find the value of x.

93)



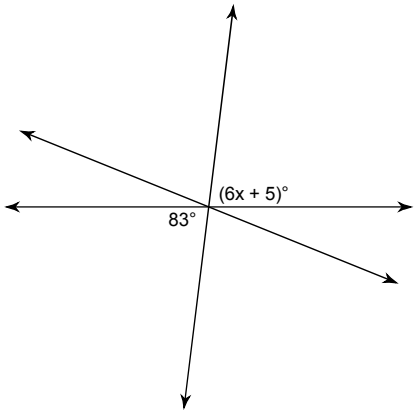
A) 27 B) 21
C) 18 D) 33

94)



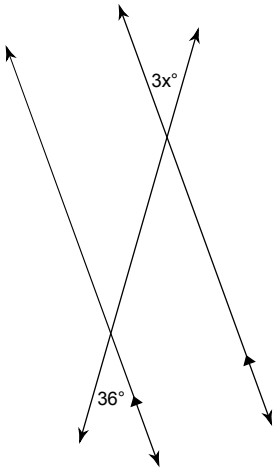
A) 48 B) 51
C) 46 D) 57

95)



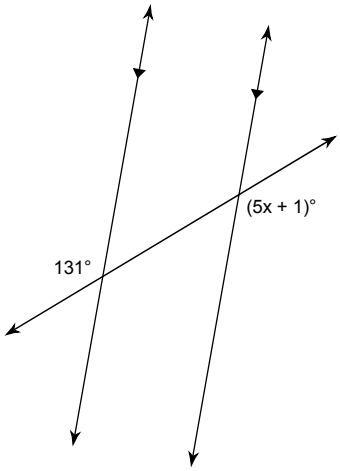
A) 11 B) 15
C) 18 D) 13

96)



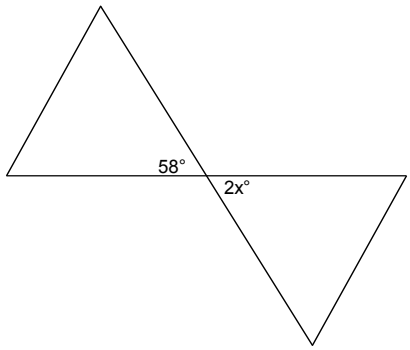
A) 17 B) 19
C) 14 D) 12

97)



A) 36 B) 33
C) 28 D) 26

98)



A) 21 B) 30
C) 29 D) 27