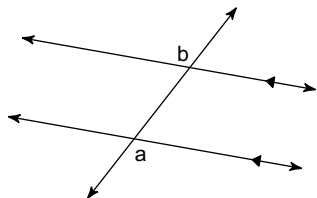


Final Exam Review #2

Date _____ Period _____

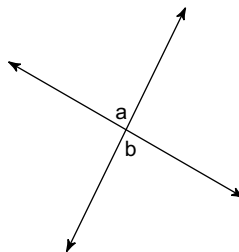
Name the relationship: complementary, linear pair, vertical, adjacent, alternate interior, corresponding, or alternate exterior.

1)



- A) linear pair
- B) complementary
- C) alternate exterior
- D) alternate interior

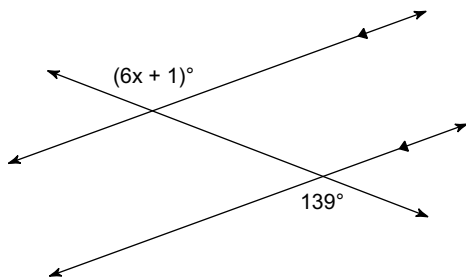
2)



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

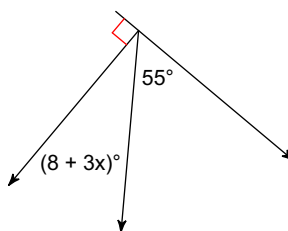
Find the value of x.

3)



- A) 23
- B) 26
- C) 20
- D) 17

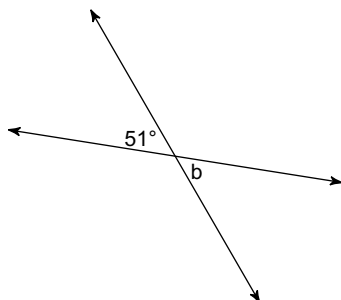
4)



- A) 3
- B) 1
- C) 9
- D) -3

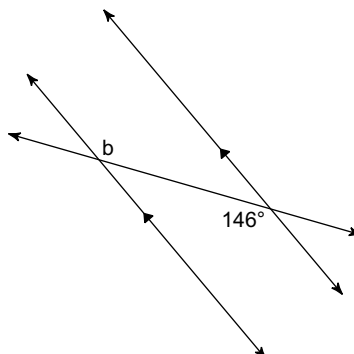
Find the measure of angle b.

5)



- A) 129°
- B) 72°
- C) 18°
- D) 51°

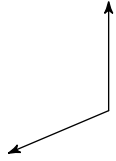
6)



- A) 124°
- B) 146°
- C) 56°
- D) 34°

Classify each angle as acute, obtuse, right, or straight.

7)



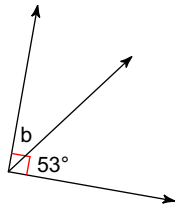
- A) obtuse B) straight
C) right D) acute

8) 121°

- A) right B) acute
C) straight D) obtuse

Find the measure of angle b.

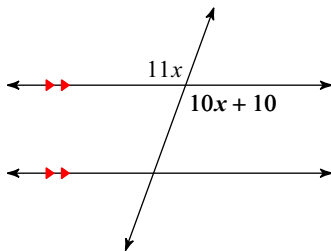
9)



- A) 37° B) 36°
C) 143° D) 126°

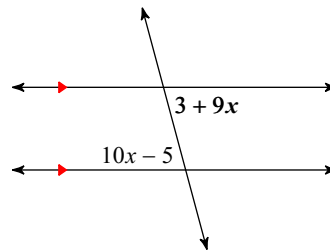
Find the measure of the angle indicated in bold.

10)



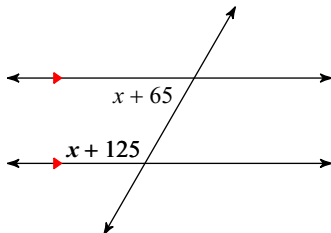
- A) 85° B) 100°
C) 95° D) 110°

11)



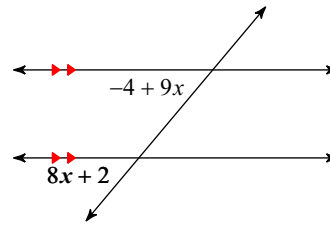
- A) 55° B) 75°
C) 65° D) 70°

12)



- A) 120° B) 81°
C) 115° D) 145°

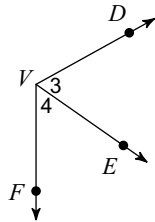
13)



- A) 50° B) 40°
C) 105° D) 65°

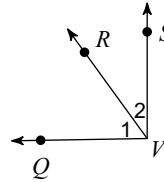
Name all the angles that have V as a vertex.

14)



- A) $\angle 3, \angle 4, \angle EDV$
- B) $\angle 3, \angle 4, \angle FED$
- C) $\angle 3, \angle 4, \angle DVF$
- D) $\angle 3, \angle 4, \angle VFE$

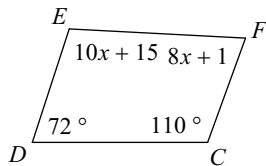
15)



- A) $\angle 1, \angle 2, \angle QVS$
- B) $\angle 1, \angle 2, \angle VSR$
- C) $\angle 1, \angle 2, \angle RQV$
- D) $\angle 1, \angle 2, \angle SRQ$

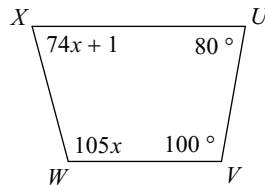
Find the measure of each angle indicated.

16) $m\angle F$



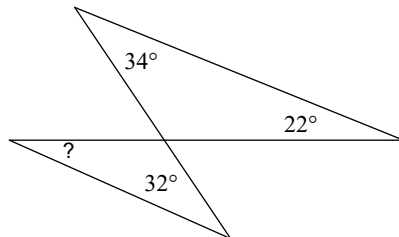
- A) 73°
- B) 91°
- C) 94°
- D) 120°

17) $m\angle W$



- A) 60°
- B) 108°
- C) 80°
- D) 105°

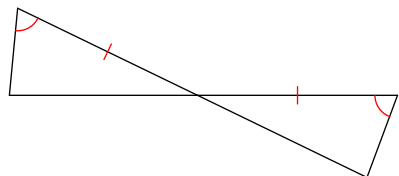
18)



- A) 145°
- B) 24°
- C) 31°
- D) 51°

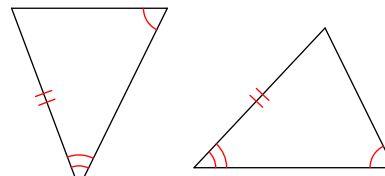
State if the two triangles are congruent. If they are, state how you know.

19)



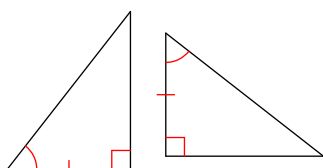
- A) ASA
- B) SAS
- C) SSS
- D) Not congruent

20)



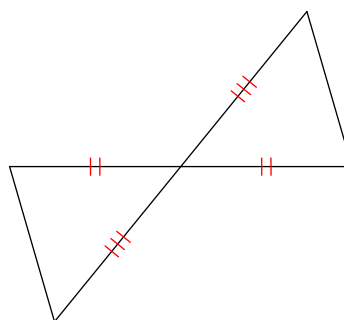
- A) Not congruent
- B) SSS
- C) ASA
- D) AAS

21)



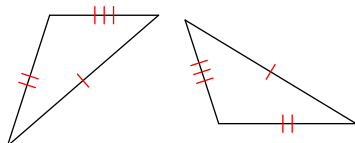
- A) SAS B) ASA
C) AAS D) SSS

22)



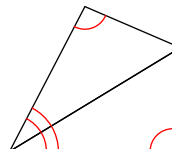
- A) SAS B) ASA
C) SSS D) Not congruent

23)



- A) SAS B) AAS
C) ASA D) SSS

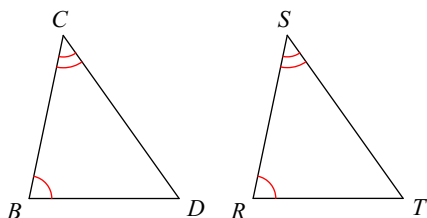
24)



- A) SSS B) AAS
C) Not congruent D) ASA

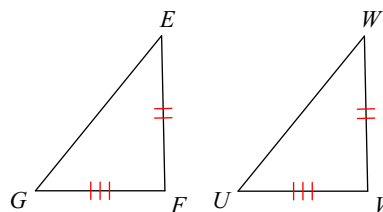
State what additional information is required in order to know that the triangles are congruent for the reason given.

25) ASA



- A) $\overline{BC} \cong \overline{RS}$
B) $\overline{CD} \cong \overline{ST}$ or $\overline{DB} \cong \overline{TR}$
C) $\angle B \cong \angle R$
D) $\angle C \cong \angle S$

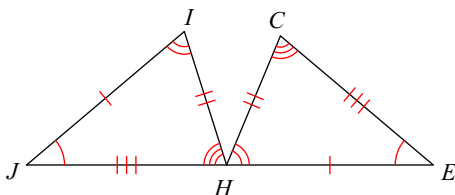
26) SSS



- A) $\overline{FG} \cong \overline{VU}$ or $\overline{GE} \cong \overline{UW}$
B) $\angle E \cong \angle W$
C) $\overline{EF} \cong \overline{WV}$
D) $\overline{GE} \cong \overline{UW}$

Complete each congruence statement by naming the corresponding angle or side.

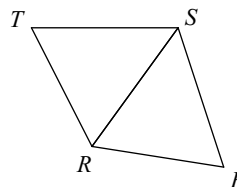
27) $\triangle JIH \cong \triangle EHC$



$\angle J \cong ?$

- A) $\angle E$ B) $\angle C$
C) $\angle EHC$ D) $\angle H$

28) $\triangle SRT \cong \triangle SRF$

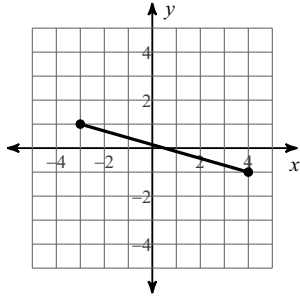


$\overline{RT} \cong ?$

- A) $\angle F$ B) $\overline{FS}$
C) $\overline{RF}$ D) $\overline{SR}$

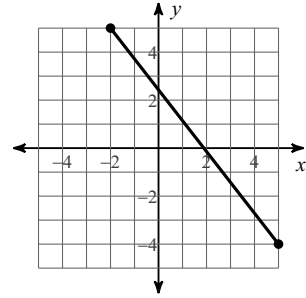
Find the distance between each pair of points.

29)



- A) 1 B) $3\sqrt{13}$
C) 3 D) $\sqrt{53}$

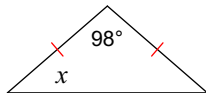
30)



- A) $3\sqrt{5}$ B) $\sqrt{130}$
C) 4 D) $\sqrt{10}$

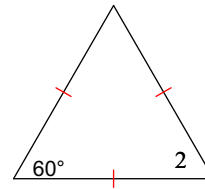
Find the value of x .

31)



- A) 44° B) 41°
C) 29° D) 54°

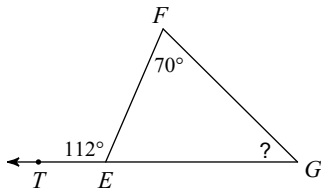
32) $m\angle 2 = x + 67$



- A) -7 B) 8
C) 9 D) 12

Find the measure of each angle indicated.

33)

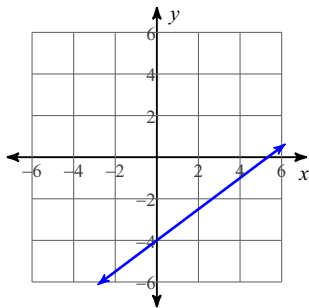


- A) 42° B) 68°
C) 51° D) 34°

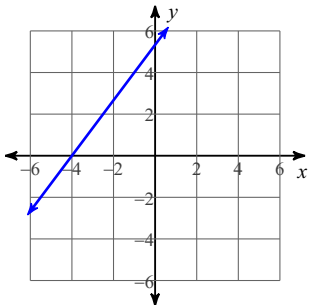
Sketch the graph of each line.

34) $y = \frac{3}{4}x - 4$

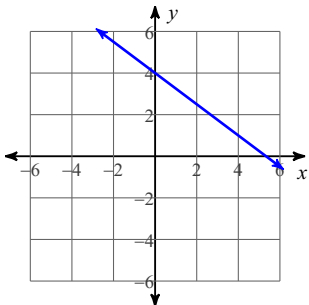
A)



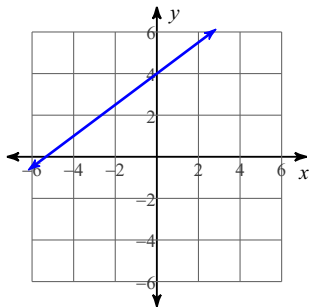
B)



C)

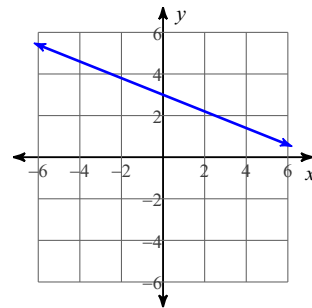


D)

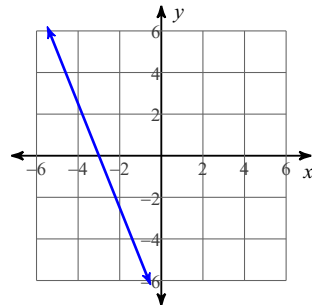


35) $y = -\frac{2}{5}x + 3$

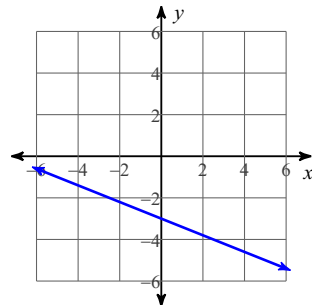
A)



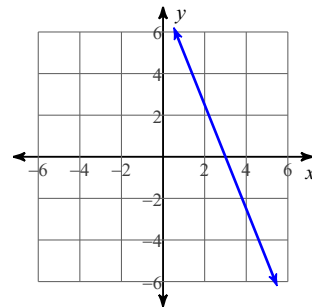
B)



C)



D)



Find the midpoint of the line segment with the given endpoints.

36) $(-7, -3), (-1, -1)$

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

37) $(2, 4), (2, 3)$

- A) $\left(3, 2\frac{1}{2}\right)$ B) $(2, 2)$
C) $\left(0, \frac{1}{2}\right)$ D) $\left(2, 3\frac{1}{2}\right)$

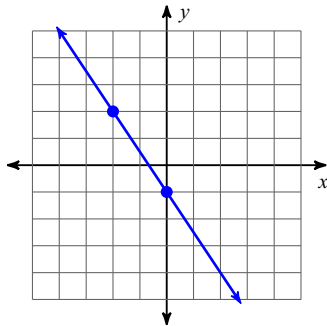
Find the other endpoint of the line segment with the given endpoint and midpoint.

38) Endpoint: $(3, -5)$, midpoint: $(5, 3)$

- A) $(-1, 4)$ B) $(-1, -4)$
C) $(7, 11)$ D) $\left(-2\frac{1}{2}, -2\frac{1}{2}\right)$

Find the slope of each line.

39)



- A) $\frac{3}{2}$ B) $\frac{2}{3}$
C) $-\frac{3}{2}$ D) $-\frac{2}{3}$

Find the slope of the line through each pair of points.

40) $(-5, -20), (-13, 18)$

- A) $-\frac{4}{19}$ B) $\frac{19}{4}$
C) $-\frac{19}{4}$ D) $\frac{4}{19}$

41) $(-13, -7), (-11, -5)$

- A) 1 B) -1
C) $-\frac{1}{5}$ D) $\frac{1}{5}$

Find the slope of a line parallel to each given line.

42) $y = \frac{5}{2}x + 5$

- A) $-\frac{5}{2}$ B) $\frac{5}{2}$
 C) $\frac{2}{5}$ D) $-\frac{2}{5}$

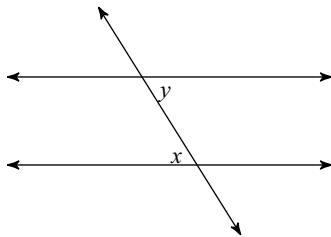
Find the slope of a line perpendicular to each given line.

43) $y = -3x + 1$

- A) $\frac{1}{3}$ B) 3
 C) $-\frac{1}{3}$ D) -3

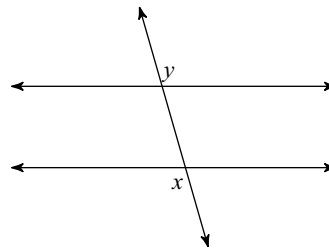
Identify each pair of angles as corresponding, alternate interior, alternate exterior, consecutive interior, vertical, or adjacent.

44)



- A) alternate interior
 B) corresponding
 C) alternate exterior
 D) consecutive interior

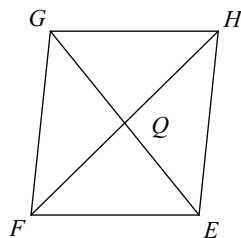
45)



- A) alternate interior
 B) alternate exterior
 C) consecutive interior
 D) corresponding

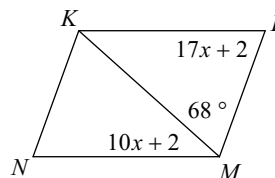
Find the measurement indicated in each parallelogram.

46) $FQ = x + 9$
 $QH = 3x - 7$
 Find FQ



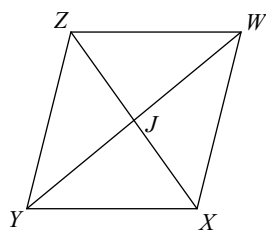
- A) 16 B) 17
 C) 9 D) 22

47) Find $m\angle N$



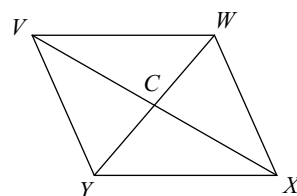
- A) 50° B) 70°
 C) 85° D) 121°

- 48) $XJ = 2x$
 $JZ = 3x - 5$
 Find XZ



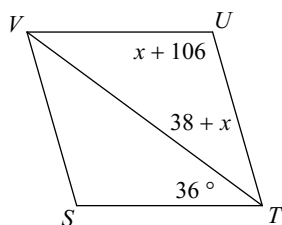
- A) 18 B) 17
 C) 20 D) 21

- 49) $WC = x + 3$
 $WY = x + 17$
 Find WC



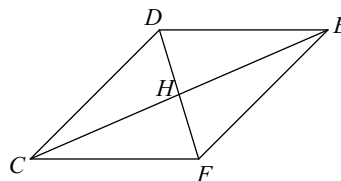
- A) 14 B) 13
 C) 23 D) 17

- 50) Find $m\angle UVS$



- A) 105° B) 74°
 C) 100° D) 30°

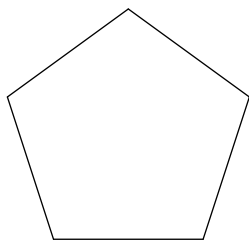
- 51) $DH = 3x$
 $HF = 2x + 2$
 Find DH



- A) 19 B) 9 C) 6 D) 8

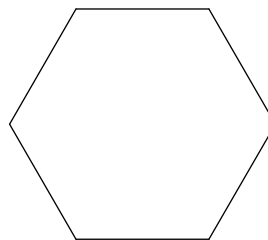
Find the interior angle sum for each polygon. Round your answer to the nearest tenth if necessary.

- 52)



- A) 360° B) 1440°
 C) 900° D) 540°

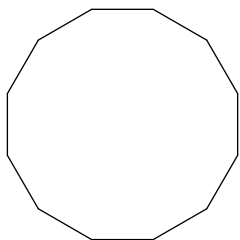
- 53)



- A) 540° B) 1080°
 C) 720° D) 1260°

Find the measure of one exterior angle in each regular polygon. Round your answer to the nearest tenth if necessary.

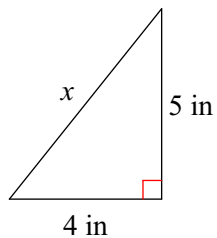
- 54)



- A) 30° B) 24°
 C) 36° D) 22.5°

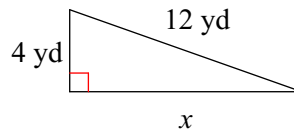
Find the missing side of each triangle. Leave your answers in simplest radical form.

55)



- A) $\sqrt{41}$ in B) 3 in
C) $\sqrt{66}$ in D) $\sqrt{57}$ in

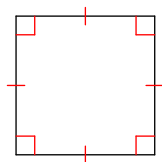
56)



- A) $4\sqrt{7}$ yd B) $8\sqrt{2}$ yd
C) $4\sqrt{10}$ yd D) $4\sqrt{17}$ yd

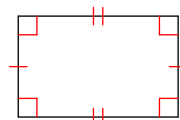
State the most specific name for each figure.

57)



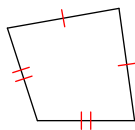
- A) square B) kite
C) quadrilateral D) trapezoid

58)



- A) rectangle B) trapezoid
C) quadrilateral D) kite

59)



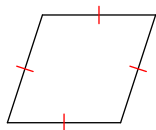
- A) kite
B) quadrilateral
C) isosceles trapezoid
D) trapezoid

60)



- A) quadrilateral B) trapezoid
C) parallelogram D) kite

61)



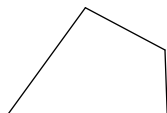
- A) trapezoid B) rhombus
C) kite D) quadrilateral

62)



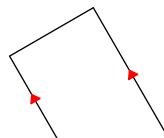
- A) quadrilateral
B) kite
C) trapezoid
D) isosceles trapezoid

63)



- A) kite
B) trapezoid
C) quadrilateral
D) isosceles trapezoid

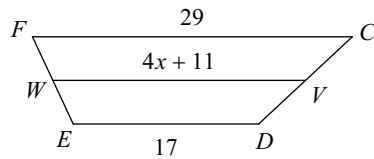
64)



- A) trapezoid
B) isosceles trapezoid
C) kite
D) quadrilateral

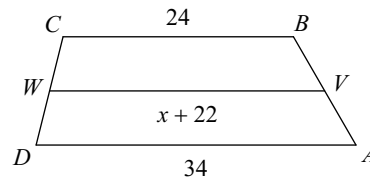
Solve for x . Each figure is a trapezoid.

65)



- A) 12 B) 5
C) 3 D) 1

66)



- A) 2 B) 7
C) 11 D) 3

State if the three numbers can be the measures of the sides of a triangle.

67) 8, 7, 14

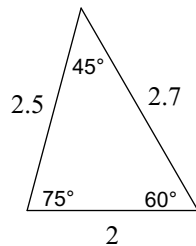
- A) No B) Yes

68) 22, 12, 7

- A) No B) Yes

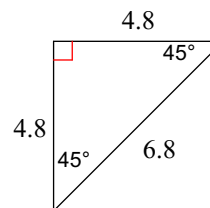
Classify each triangle by its angles and sides.

69)



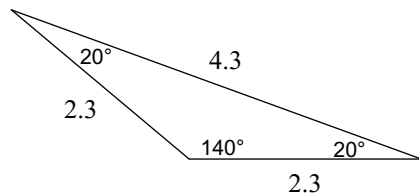
- A) right obtuse
B) obtuse isosceles
C) right isosceles
D) acute scalene

70)



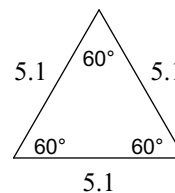
- A) acute isosceles
B) right isosceles
C) acute scalene
D) acute right

71)



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

72)



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