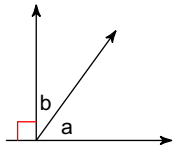


Final Exam Review 2020

Date _____ Period _____

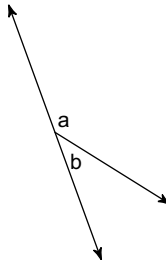
Name the relationship: complementary, linear pair, vertical, adjacent, alternate interior, corresponding, or alternate exterior.

1)



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

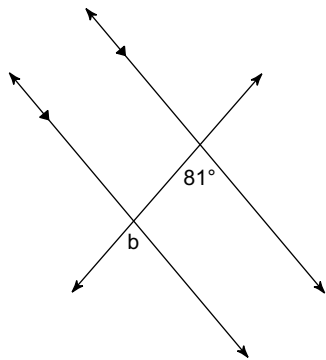
2)



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

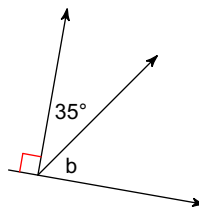
Find the measure of angle b.

3)



- A) 9°
- B) 126°
- C) 90°
- D) 81°
- E) 171°

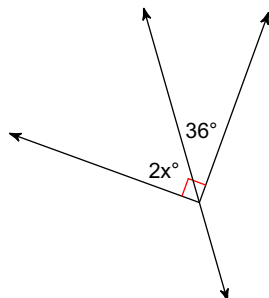
4)



- A) 35°
- B) 158°
- C) 68°
- D) 55°
- E) 22°

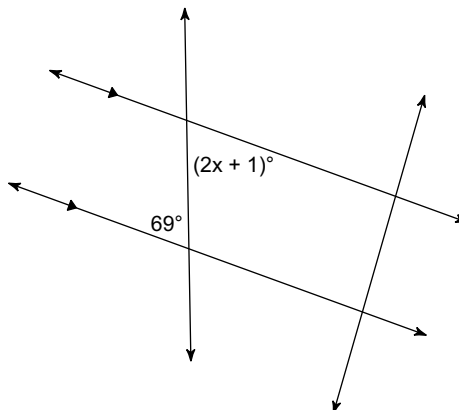
Find the value of x.

5)



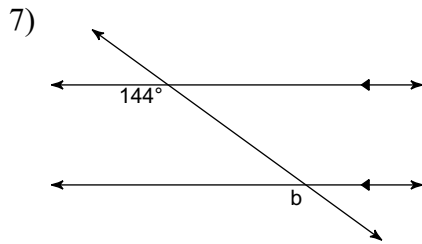
- A) 33
- B) 36
- C) 27
- D) 35
- E) 34

6)

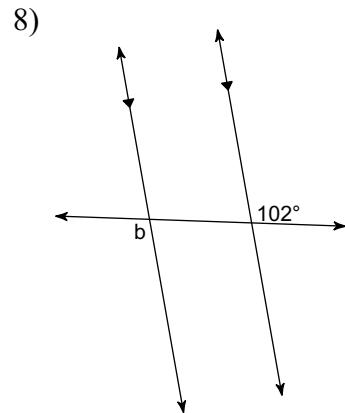


- A) 40
- B) 35
- C) 41
- D) 37
- E) 34

Find the measure of angle b.

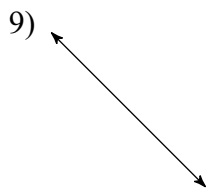


- A) 36° B) 126°
 C) 112° D) 54°
 E) 144°



- A) 127° B) 168°
 C) 102° D) 12°
 E) 57°

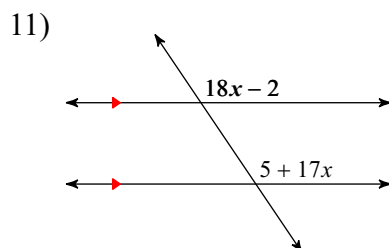
Classify each angle as acute, obtuse, right, or straight.



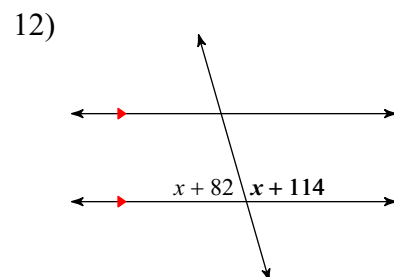
- A) straight B) acute
 C) right D) obtuse

- 10) 175°
 A) obtuse B) right
 C) acute D) straight

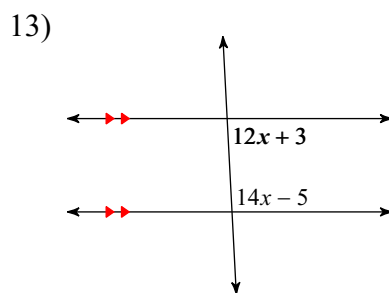
Find the measure of the angle indicated in bold.



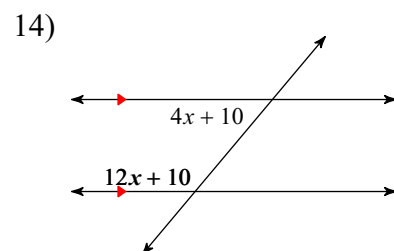
- A) 115° B) 124°
 C) 121° D) 123°
 E) 113°



- A) 95° B) 106°
 C) 143° D) 80°
 E) 135°

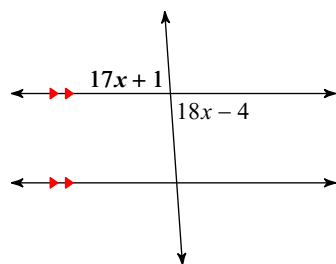


- A) 73° B) 59° C) 57°
 D) 109° E) 87°



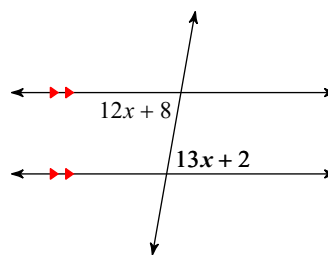
- A) 140° B) 55°
 C) 130° D) 100°
 E) 60°

15)



- A) 84° B) 63° C) 86°
 D) 80° E) 81°

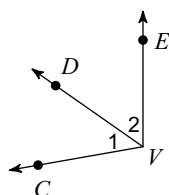
16)



- A) 80° B) 120°
 C) 60° D) 122°
 E) 54°

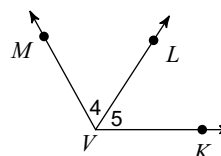
Name all the angles that have V as a vertex.

17)



- A) $\angle 1, \angle 2, \angle VED$
 B) $\angle 1, \angle 2, \angle EDC$
 C) $\angle 1, \angle 2, \angle DCV$
 D) $\angle 1, \angle 2, \angle CVE$

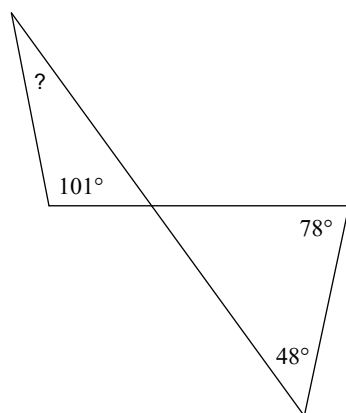
18)



- A) $\angle 4, \angle 5, \angle VKL$
 B) $\angle 4, \angle 5, \angle KLM$
 C) $\angle 4, \angle 5, \angle MVK$
 D) $\angle 4, \angle 5, \angle LMV$

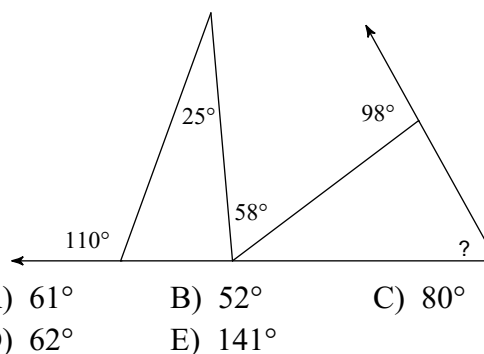
Find the measure of each angle indicated.

19)



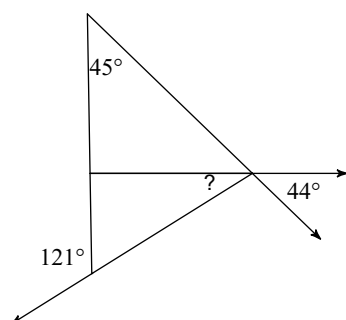
- A) 31° B) 30° C) 60°
 D) 100° E) 25°

20)



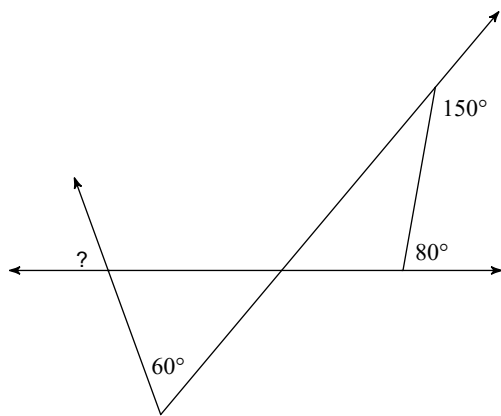
- A) 61° B) 52° C) 80°
 D) 62° E) 141°

21)



- A) 32° B) 55° C) 42°
 D) 30° E) 116°

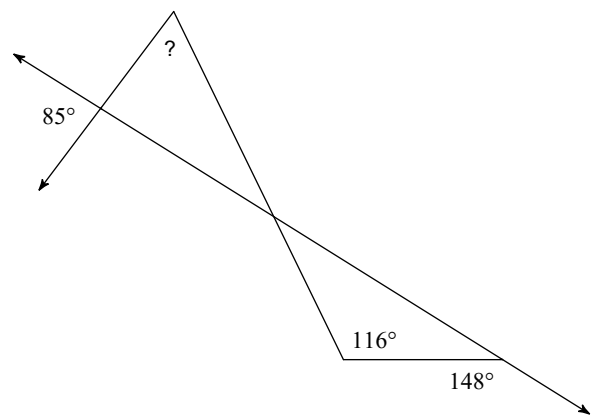
22)



- A) 70° B) 55° C) 89°
 D) 85° E) 87°

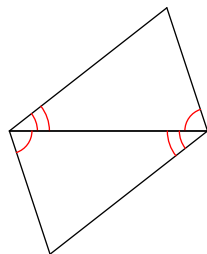
Determine if the two triangles are congruent. If they are, state how you know.

23)



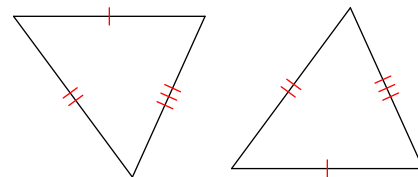
- A) 145° B) 43° C) 63°
 D) 70° E) 64°

24)



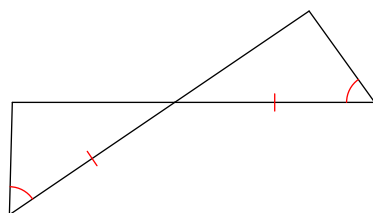
- A) Not enough information
 B) AAS
 C) ASA
 D) SSS
 E) HL

25)



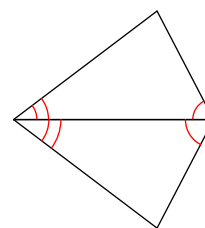
- A) SSS B) HL
 C) ASA D) SAS
 E) AAS

26)



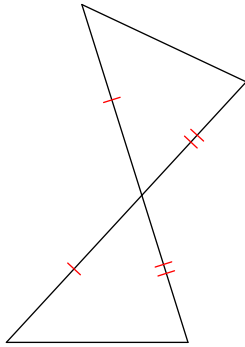
- A) ASA B) AAS
 C) HL D) SSS
 E) SAS

27)



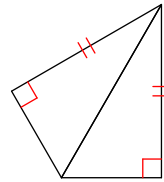
- A) SSS B) HL
 C) ASA D) AAS
 E) SAS

28)



- A) SAS
- B) Not enough information
- C) SSS
- D) HL
- E) AAS

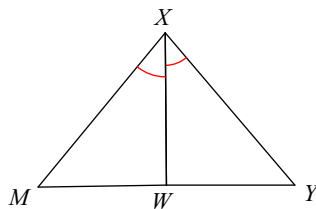
29)



- A) SAS
- B) SSS
- C) HL
- D) Not enough information
- E) ASA

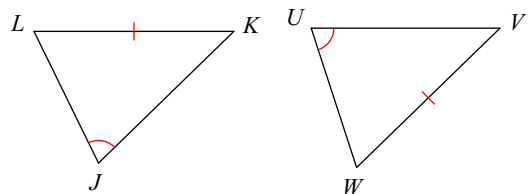
State what additional information is required in order to know that the triangles are congruent for the reason given.

30) ASA



- A) $\angle WXY \cong \angle WXM$
- B) $\overline{WX} \cong \overline{WX}$
- C) $\overline{XY} \cong \overline{XM}$
- D) $\angle YWX \cong \angle MWX$

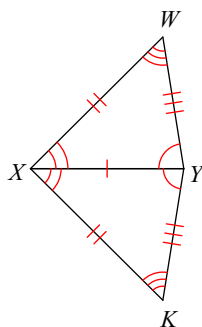
31) AAS



- A) $\angle K \cong \angle V$ or $\angle L \cong \angle W$
- B) $\overline{JK} \cong \overline{UV}$ or $\overline{LJ} \cong \overline{WU}$
- C) $\overline{JK} \cong \overline{UV}$ or $\overline{KL} \cong \overline{VW}$
- D) $\overline{KL} \cong \overline{VW}$ or $\overline{LJ} \cong \overline{WU}$

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

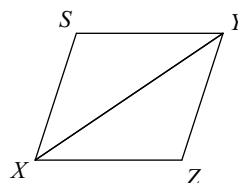
32) $\triangle YXW \cong \triangle YXK$



$\overline{YX} \cong ?$

- A) $\overline{YX}$
- B) $\angle YXK$
- C) $\overline{XK}$
- D) $\overline{KY}$

33) $\triangle XYZ \cong \triangle YXS$

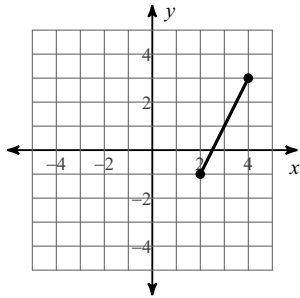


$\angle XYZ \cong ?$

- A) $\angle Y$
- B) $\angle SYX$
- C) $\angle S$
- D) $\angle YXS$

Find the distance between each pair of points.

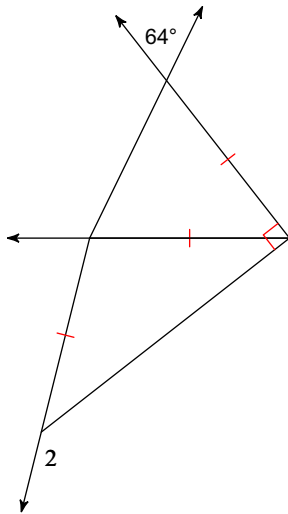
34)



- A) $\sqrt{10}$ B) $2\sqrt{5}$
C) 2 D) $\sqrt{6}$

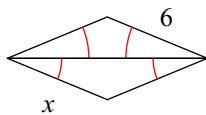
Find the value of x .

36) $m\angle 2 = x + 152$



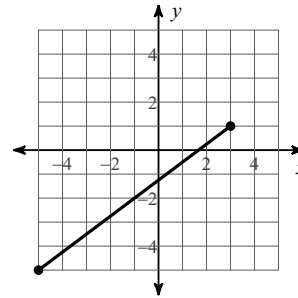
- A) -12 B) -9 C) 8
D) -10 E) -11

38)



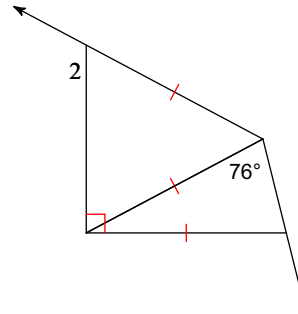
- A) 6 B) 11 C) 8
D) 10 E) 12

35)



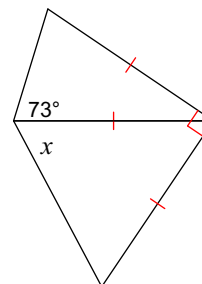
- A) $\sqrt{2}$ B) $\sqrt{14}$
C) $2\sqrt{5}$ D) 10

37) $m\angle 2 = x + 129$



- A) 12 B) -11 C) -9
D) 9 E) 8

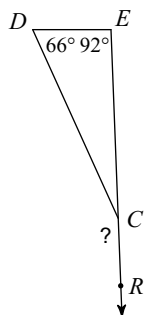
39)



- A) 83° B) 73° C) 62°
D) 60° E) 79°

Find the measure of each angle indicated.

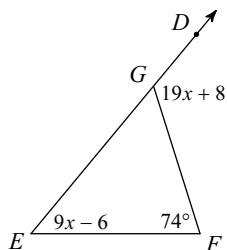
40)



- A) 158° B) 128°
 C) 141° D) 155°
 E) 22°

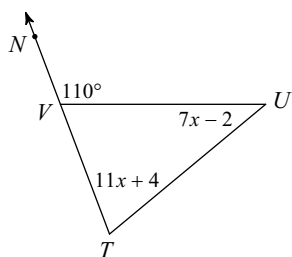
Solve for x .

42)



- A) 2 B) 15 C) 6
 D) 1 E) 13

44) Find $m\angle U$.



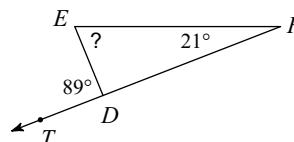
- A) 37° B) 40° C) 48°
 D) 34° E) 70°

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

46) $(-2, 1)$, $(0, 7)$

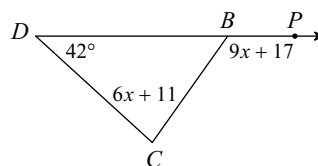
- A) $(-1, -3)$ B) $\left(-\frac{1}{2}, 3\frac{1}{2}\right)$
 C) $(2, 13)$ D) $(-1, 4)$

41)



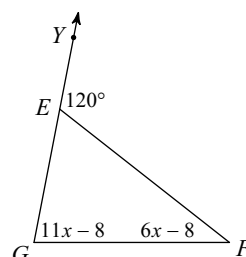
- A) 91° B) 79° C) 55°
 D) 68° E) 53°

43)



- A) 10 B) 7 C) 6
 D) 12 E) 15

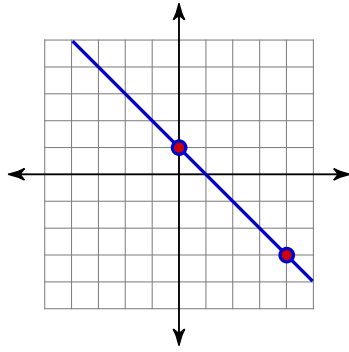
45) Find $m\angle G$.



- A) 40° B) 86° C) 88°
 D) 97° E) 80°

Find the slope of each line.

48)



- A) 1 B) $-\frac{1}{2}$
C) -1 D) $\frac{1}{2}$

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

49) $(-20, 5), (-14, 16)$

- A) $-\frac{6}{11}$ B) $\frac{11}{6}$
C) $-\frac{11}{6}$ D) $\frac{6}{11}$

50) $(18, -1), (19, 0)$

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

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

51) $y = -\frac{1}{3}x + 1$

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

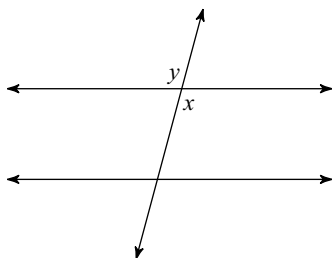
Find the slope of a line perpendicular to each given line.

52) $y = -6x - 5$

- A) 6 B) $-\frac{1}{6}$
C) $\frac{1}{6}$ D) -6

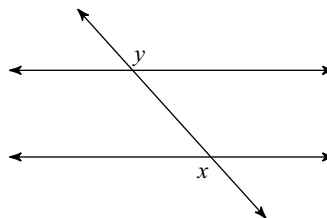
Identify each pair of angles as corresponding, alternate interior, alternate exterior, same-side interior, vertical, or adjacent.

53)



- A) same-side interior
- B) alternate interior
- C) vertical
- D) alternate exterior
- E) corresponding

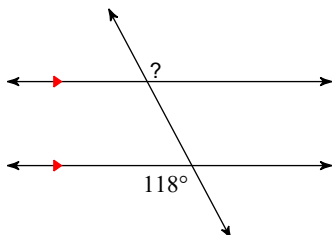
54)



- A) alternate exterior
- B) same-side interior
- C) corresponding
- D) alternate interior
- E) vertical

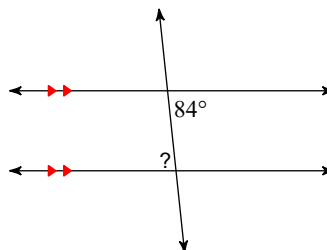
Find the measure of each angle indicated.

55)



- A) 106°
- B) 118°
- C) 45°
- D) 101°
- E) 114°

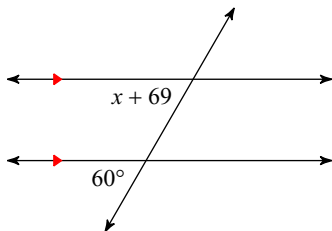
56)



- A) 88°
- B) 84°
- C) 63°
- D) 69°
- E) 95°

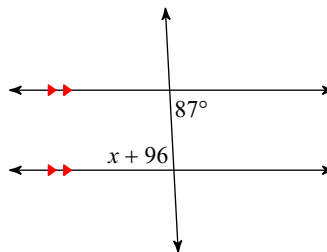
Solve for x .

57)



- A) -5
- B) -9
- C) -8
- D) 9
- E) 8

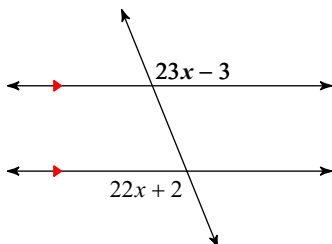
58)



- A) 6
- B) -6
- C) -7
- D) 9
- E) -9

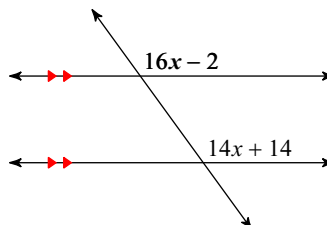
Find the measure of the angle indicated in bold.

59)



- A) 46°
- B) 65°
- C) 107°
- D) 60°
- E) 112°

60)



- A) 92°
- B) 120°
- C) 135°
- D) 140°
- E) 126°

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

61) 6, 3, 12

- A) No B) Yes

62) 10, 10, 18

- A) No B) Yes

Two sides of a triangle have the following measures. Find the range of possible measures for the third side.

63) 8, 9

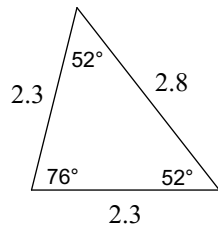
- A) $4 < x < 13$ B) $1 < x < 17$
 C) $1 < x < 14$ D) $2 < x < 17$
 E) $1 < x < 15$

64) 6, 9

- A) $3 < x < 13$ B) $3 < x < 11$
 C) $3 < x < 15$ D) $3 < x < 12$
 E) $4 < x < 15$

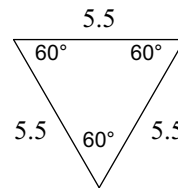
Classify each triangle by its angles and sides.

65)



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

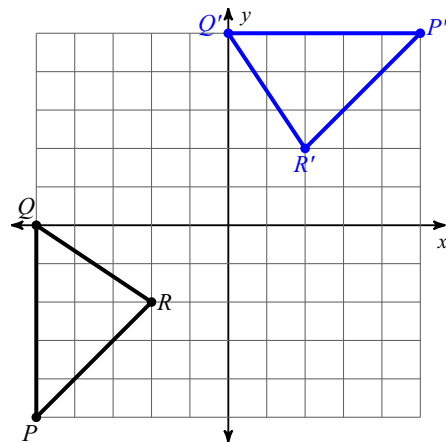
66)



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

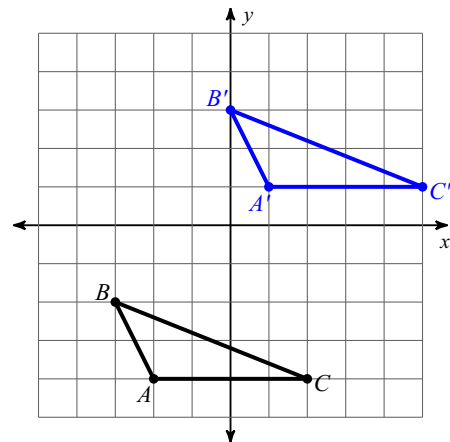
Write a rule to describe each transformation.

67)



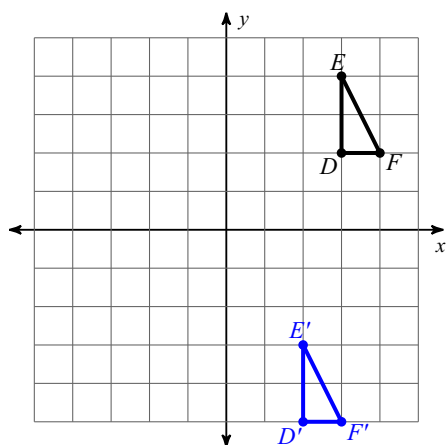
- A) translation: 5 units up
 B) reflection across $y = -x$
 C) translation: 4 units right and 4 units up
 D) reflection across $y = x$
 E) reflection across $y = -1$

68)



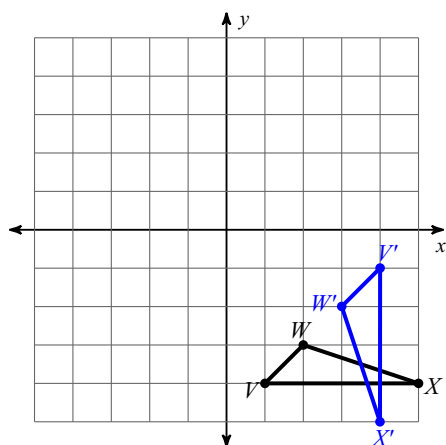
- A) translation: 3 units right and 5 units up
 B) reflection across $y = -3$
 C) translation: 2 units left and 2 units up
 D) translation: 2 units right and 2 units up
 E) translation: 1 unit right and 5 units up

69)



- A) translation: 1 unit left and 7 units down
- B) reflection across $y = 1$
- C) translation: 6 units left and 3 units down
- D) translation: 3 units left and 1 unit down
- E) reflection across $x = 1$

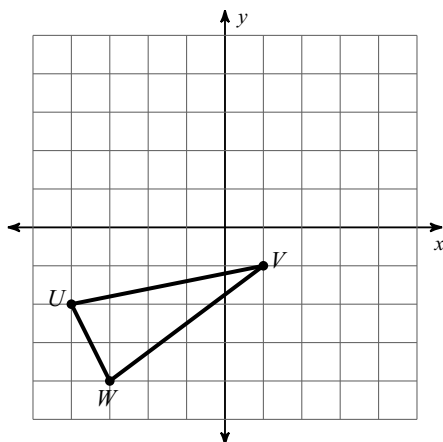
70)



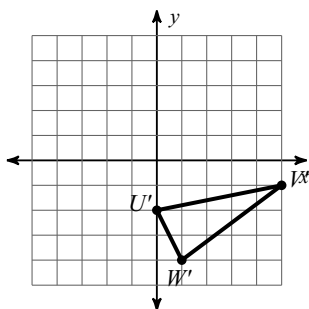
- A) reflection across $y = -3$
- B) reflection across $y = x$
- C) translation: 1 unit left and 6 units up
- D) reflection across $y = -x$
- E) reflection across $x = 3$

Graph the image of the figure using the transformation given.

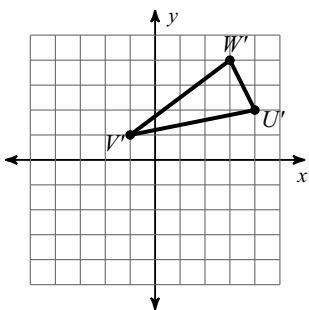
71) rotation 180° about the origin



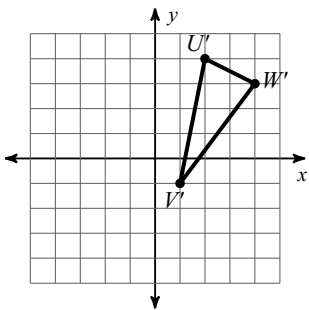
A)



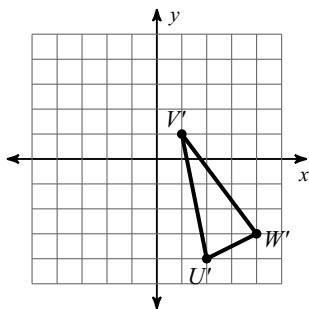
B)



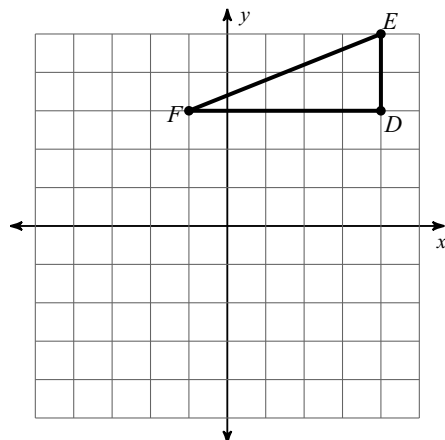
C)



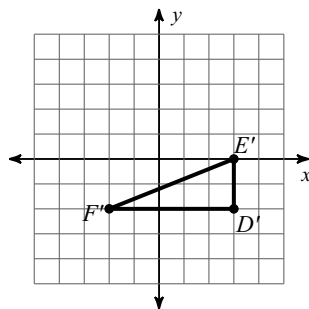
D)



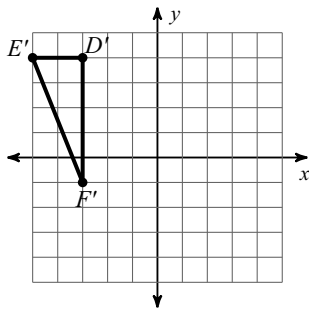
72) rotation 90° counterclockwise about the origin



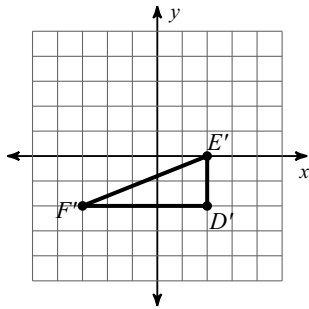
A)



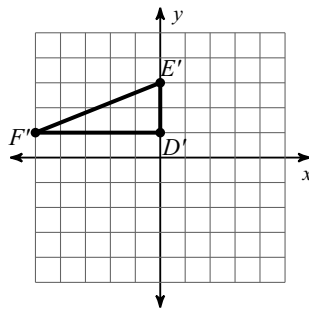
B)



C)

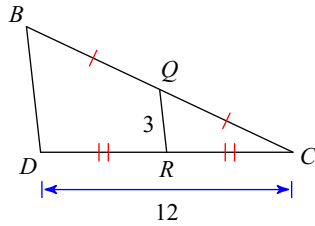


D)



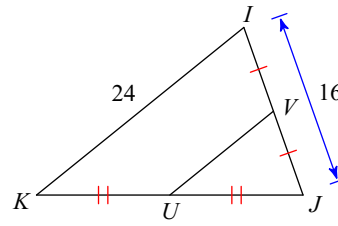
Find the missing length indicated.

73) Find BD



- A) 10 B) 6 C) 12
D) 8 E) 2

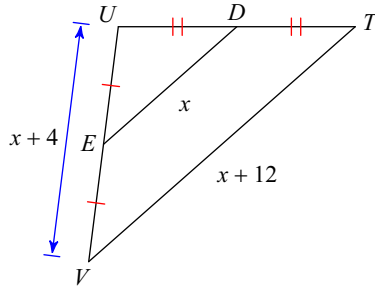
74) Find VU



- A) 12 B) 5 C) 16
D) 9 E) 6

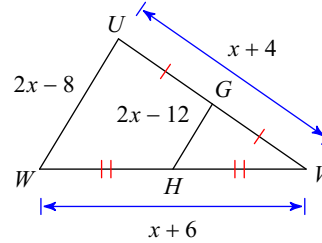
Solve for x .

75)



- A) 12 B) -12 C) 6
D) -11 E) -8

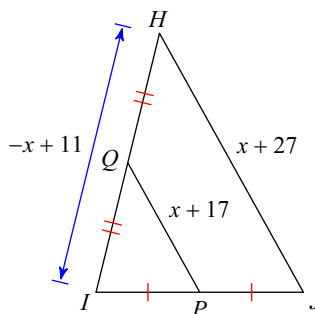
76)



- A) 12 B) 9 C) 10
D) 6 E) 8

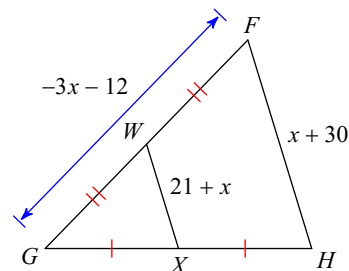
Find the missing length indicated.

77) Find PQ



- A) 16 B) 20 C) 10
D) 14 E) 18

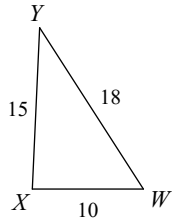
78) Find HF



- A) 16 B) 4 C) 24
D) 6 E) 18

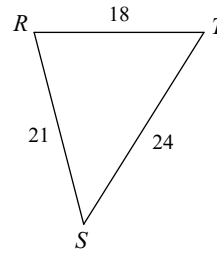
Order the angles in each triangle from smallest to largest.

79)



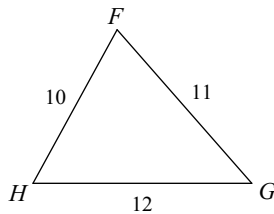
- A) $\angle X$ and $\angle Y$; $\angle W$
- B) $\angle X, \angle Y, \angle W$
- C) $\angle Y, \angle W, \angle X$
- D) $\angle W, \angle X, \angle Y$
- E) $\angle X, \angle W, \angle Y$

80)



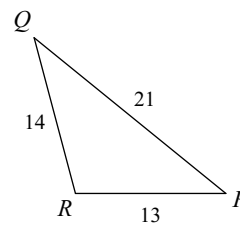
- A) $\angle S$ and $\angle R$; $\angle T$
- B) $\angle T, \angle S, \angle R$
- C) $\angle S, \angle T, \angle R$
- D) $\angle T, \angle R, \angle S$
- E) $\angle R, \angle T, \angle S$

81)



- A) $\angle F$ and $\angle G$; $\angle H$
- B) $\angle F, \angle H, \angle G$
- C) $\angle F$ and $\angle H$; $\angle G$
- D) $\angle G, \angle F, \angle H$
- E) $\angle G, \angle H, \angle F$

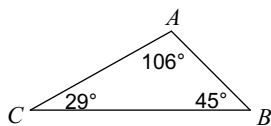
82)



- A) $\angle P, \angle R, \angle Q$
- B) $\angle Q, \angle P, \angle R$
- C) $\angle Q, \angle R, \angle P$
- D) $\angle R, \angle Q, \angle P$
- E) $\angle R, \angle P, \angle Q$

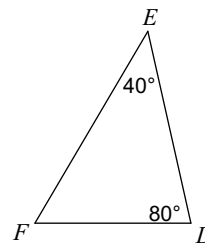
Order the sides of each triangle from shortest to longest.

83)

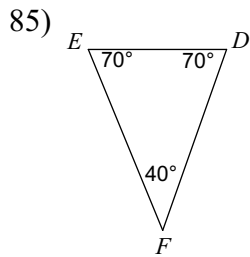


- A) $\overline{AC}, \overline{AB}, \overline{BC}$
- B) $\overline{BC}, \overline{AB}, \overline{AC}$
- C) $\overline{AB}, \overline{BC}, \overline{AC}$
- D) $\overline{AB}, \overline{AC}, \overline{BC}$
- E) $\overline{AC}$ and $\overline{AB}$; $\overline{BC}$

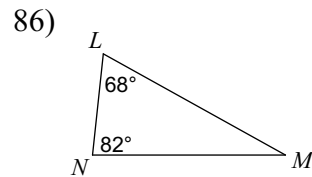
84)



- A) $\overline{FE}, \overline{ED}, \overline{FD}$
- B) $\overline{FE}, \overline{FD}, \overline{ED}$
- C) $\overline{FD}, \overline{ED}, \overline{FE}$
- D) $\overline{FD}, \overline{FE}, \overline{ED}$
- E) $\overline{ED}$ and $\overline{FE}$; $\overline{FD}$



- A) $\overline{ED}$; $\overline{FD}$ and $\overline{FE}$
 B) $\overline{ED}$, $\overline{FE}$, $\overline{FD}$
 C) $\overline{ED}$ and $\overline{FE}$; $\overline{FD}$
 D) $\overline{FE}$, $\overline{ED}$, $\overline{FD}$
 E) $\overline{FD}$, $\overline{ED}$, $\overline{FE}$



- A) $\overline{MN}$, $\overline{LM}$, $\overline{LN}$
 B) $\overline{MN}$, $\overline{LN}$, $\overline{LM}$
 C) $\overline{LN}$, $\overline{MN}$, $\overline{LM}$
 D) $\overline{LM}$, $\overline{LN}$, $\overline{MN}$
 E) $\overline{LM}$, $\overline{MN}$, $\overline{LN}$

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

87) 8, 9, 10

- A) Yes B) No

88) 3, 12, 9

- A) Yes B) No

89) 12, 18, 12

- A) No B) Yes

90) 11, 9, 12

- A) Yes B) No

Two sides of a triangle have the following measures. Find the range of possible measures for the third side.

91) 11, 12

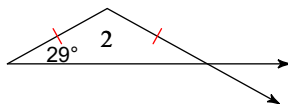
- A) $2 < x < 22$ B) $1 < x < 21$
 C) $4 < x < 23$ D) $1 < x < 23$
 E) $1 < x < 22$

92) 7, 6

- A) $5 < x < 13$ B) $1 < x < 13$
 C) $2 < x < 13$ D) $1 < x < 12$
 E) $2 < x < 11$

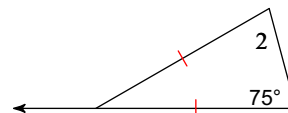
Find the value of x .

93) $m\angle 2 = 128 + x$



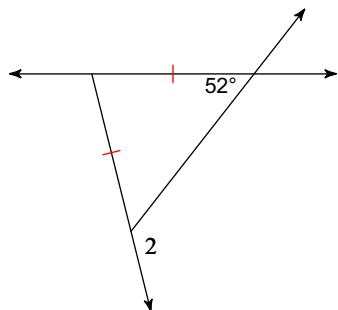
- A) -6 B) -11 C) 6
 D) 7 E) 9

94) $m\angle 2 = 7x + 12$



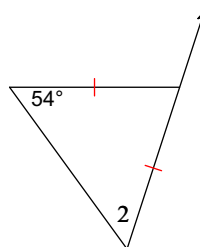
- A) 6 B) 9 C) -11
 D) 10 E) -6

95) $m\angle 2 = x + 136$



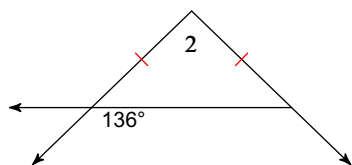
- A) 8 B) -8 C) 10
D) 6 E) 11

96) $m\angle 2 = 3x + 18$



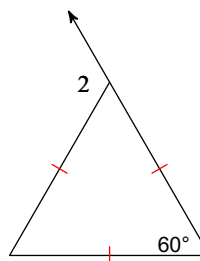
- A) -7 B) 12 C) 9
D) -6 E) -10

97) $m\angle 2 = x + 99$



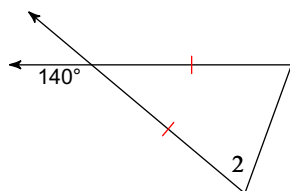
- A) 7 B) 12 C) 11
D) -7 E) -8

98) $m\angle 2 = 1 + 17x$



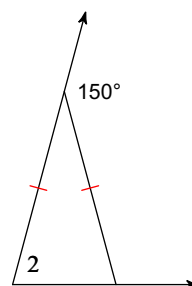
- A) 6 B) 11 C) 10
D) -7 E) 7

99) $m\angle 2 = 7x + 7$



- A) 9 B) 8 C) 10
D) 12 E) -7

100) $m\angle 2 = x + 83$



- A) 6 B) -11 C) -8
D) -9 E) 9

Answers to Final Exam Review 2020 (ID: 1)

- | | | | |
|-------|-------|-------|--------|
| 1) D | 2) B | 3) D | 4) D |
| 5) C | 6) E | 7) E | 8) C |
| 9) A | 10) A | 11) B | 12) B |
| 13) E | 14) C | 15) C | 16) A |
| 17) D | 18) C | 19) E | 20) A |
| 21) A | 22) A | 23) C | 24) C |
| 25) A | 26) A | 27) C | 28) A |
| 29) C | 30) D | 31) A | 32) A |
| 33) D | 34) B | 35) D | 36) D |
| 37) B | 38) A | 39) C | 40) A |
| 41) D | 42) C | 43) D | 44) B |
| 45) E | 46) D | 47) A | 48) C |
| 49) B | 50) B | 51) C | 52) C |
| 53) C | 54) A | 55) B | 56) B |
| 57) B | 58) E | 59) E | 60) E |
| 61) A | 62) B | 63) B | 64) C |
| 65) B | 66) A | 67) B | 68) A |
| 69) A | 70) D | 71) B | 72) B |
| 73) B | 74) A | 75) A | 76) E |
| 77) C | 78) E | 79) C | 80) C |
| 81) E | 82) B | 83) D | 84) C |
| 85) A | 86) C | 87) A | 88) B |
| 89) B | 90) A | 91) D | 92) B |
| 93) A | 94) B | 95) B | 96) B |
| 97) D | 98) E | 99) A | 100) C |