Geometry Name_____ ID: 1

Distance Learning Spring 2020

Date_____ Period____

Use the information provided to write the equation of each circle.

1) Center: $(-11, 1)$
Radius: 1

2) Center: $(-5, 14)$
Radius: $\sqrt{6}$

3) Ends of a diameter: $(-11, -8)$ and $(-17, 2)$

4) Ends of a diameter: $(-1, 6)$ and $(5, 8)$

Find the area of each.

5) circumference = 24π m

6) circumference = 14π mi

7) diameter = 22 ft

8) diameter = 16 cm

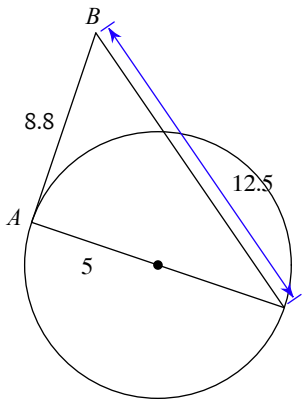
Identify the center and radius of each.

9) $(x + 7)^2 + (y + 12)^2 = 4$

10) $(x - 8)^2 + (y + 10)^2 = 36$

Determine if line AB is tangent to the circle.

11)



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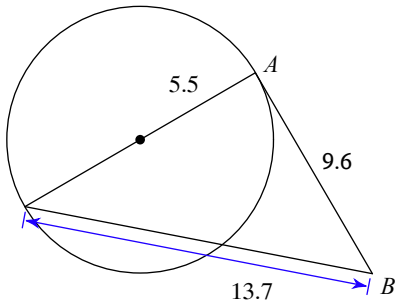

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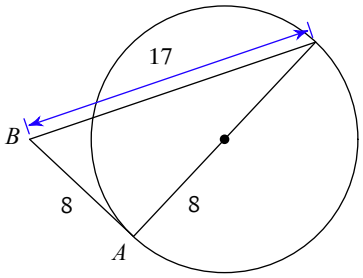
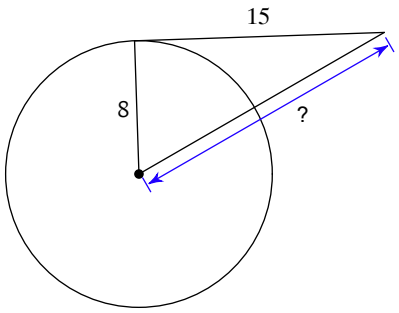


Find the segment length indicated. Assume that lines which appear to be tangent are tangent.

14)



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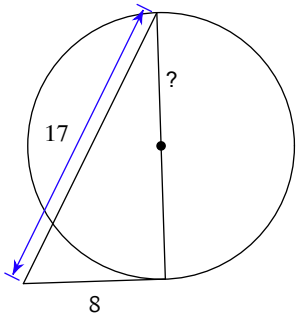

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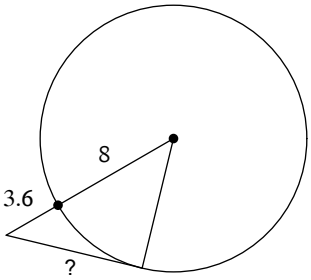
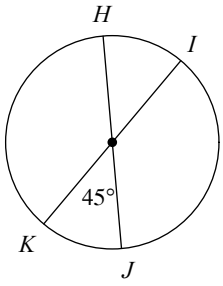
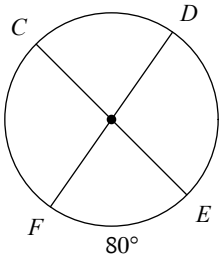


Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

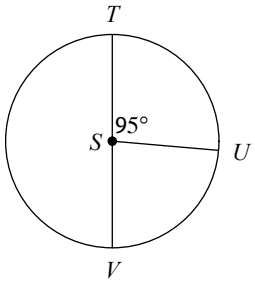
17) $m\widehat{JKI}$



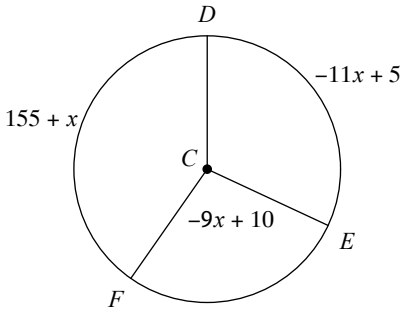
18) $m\widehat{FC}$



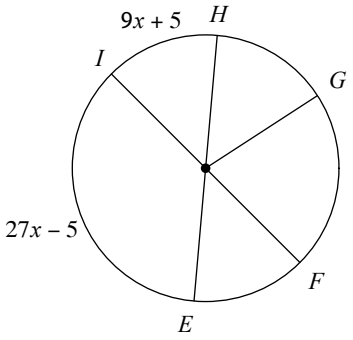
19) $m\angle USV$



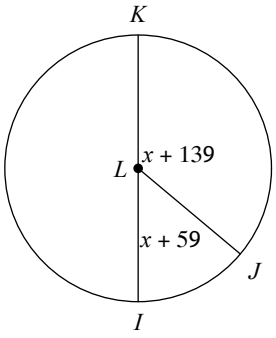
20) $m\angle FCD$



21) $m\widehat{IH}$

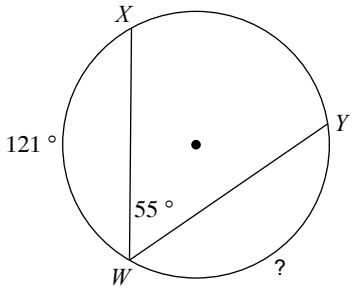


22) $m\angle JLI$



Find the measure of the arc or angle indicated.

23)



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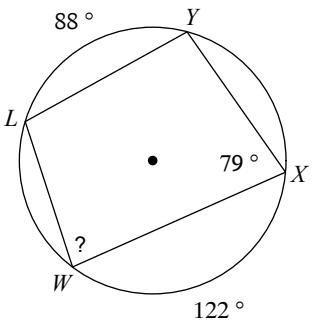

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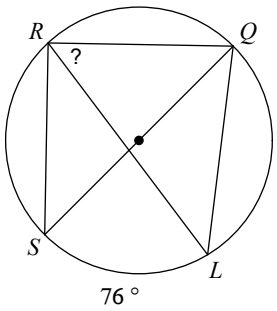
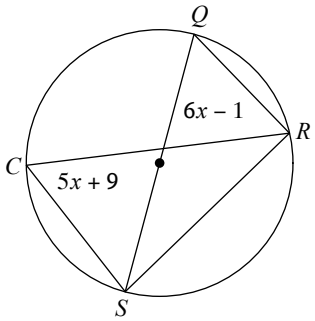
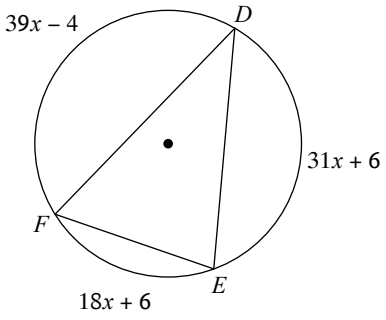


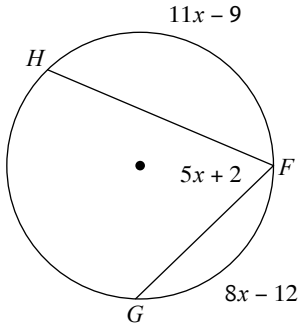
26) Find $m\angle RCS$



27) Find $m\widehat{EF}$

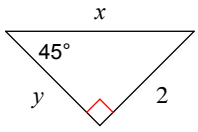


28) Find $m\widehat{FG}$



Find the missing side lengths. Leave your answers as radicals in simplest form.

29)



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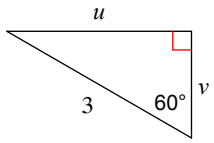

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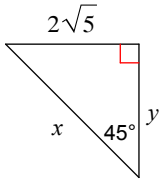

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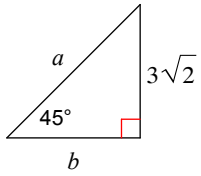

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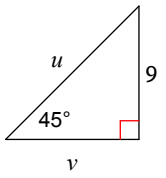

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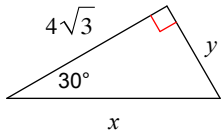

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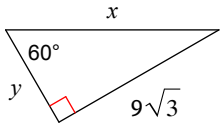

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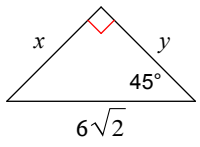

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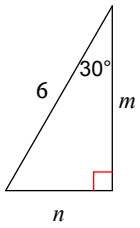

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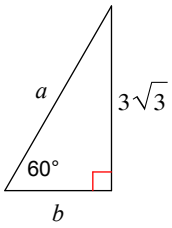

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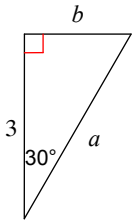

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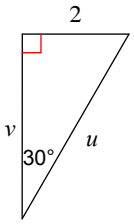

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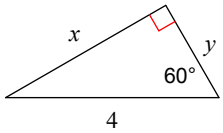

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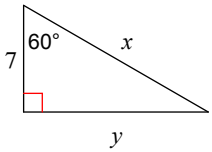

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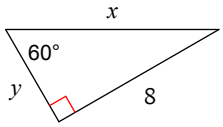

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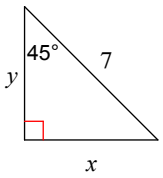

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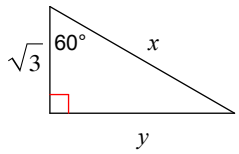

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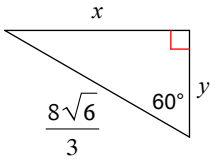
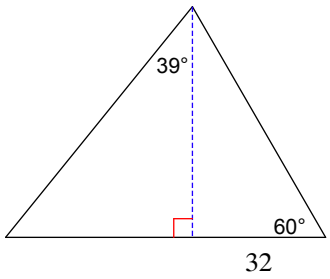


Find the area of each triangle. Round intermediate values to the nearest tenth. Use the rounded values to calculate the next value. Round your final answer to the nearest tenth.

47)



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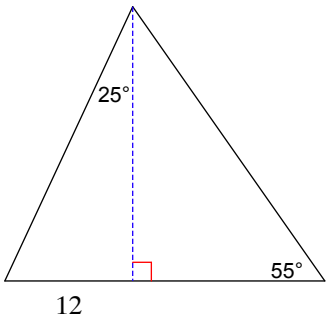

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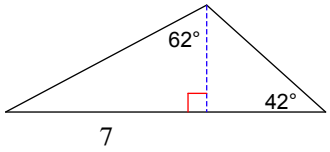

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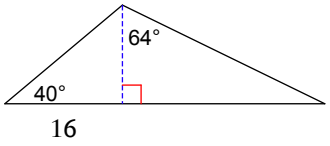

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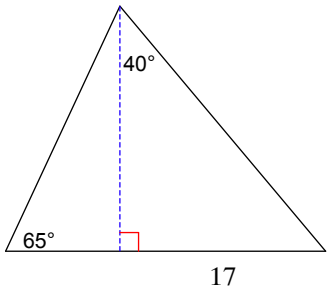

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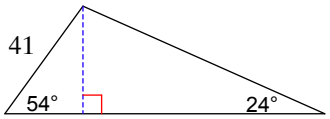

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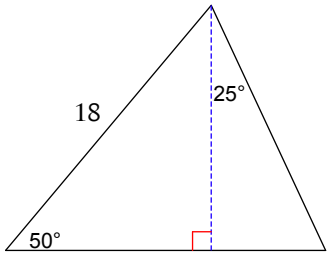

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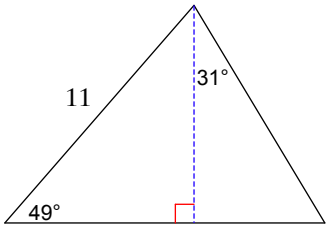

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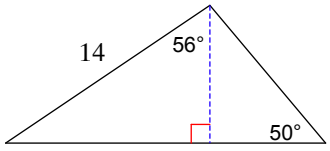

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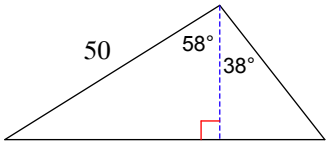
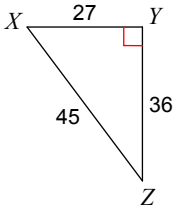
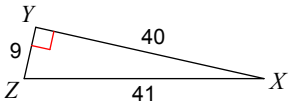


Find the value of each trigonometric ratio.

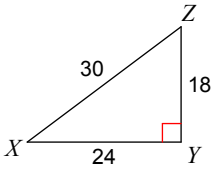
57) sin X



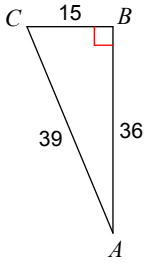
58) cos X



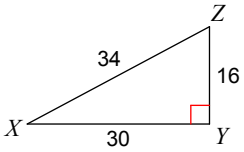
59) tan X



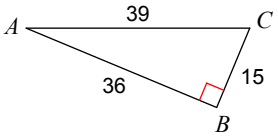
60) sin C



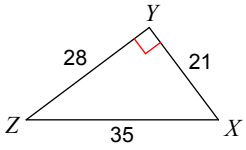
61) sin Z



62) tan A

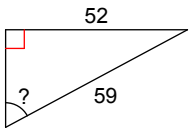


63) sin X



Find the measure of the indicated angle to the nearest degree.

64)



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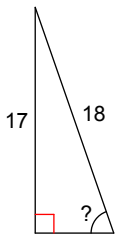

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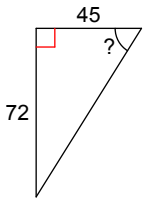

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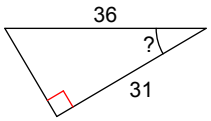
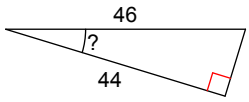
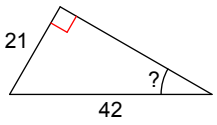


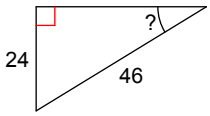
68)



69)

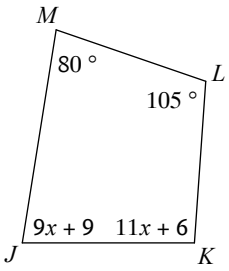


70)

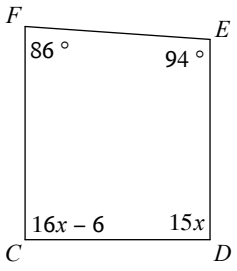


Find the measure of each angle indicated.

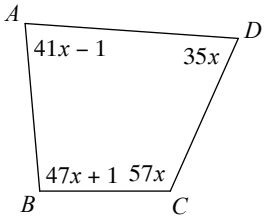
71) $m\angle K$



72) $m\angle C$

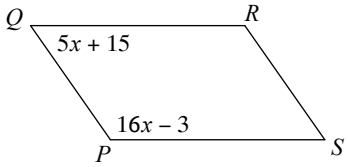


73) $m\angle D$

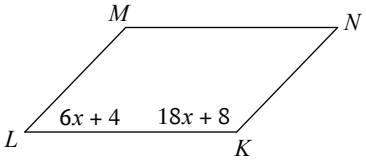


Find the measurement indicated in each parallelogram.

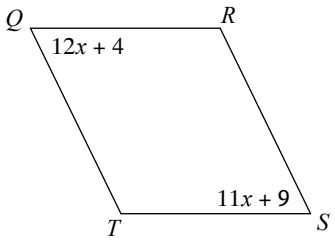
74) Find $m\angle P$



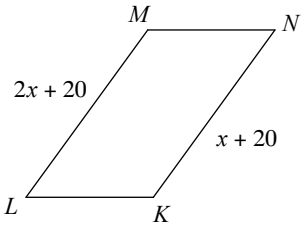
75) Find $m\angle M$



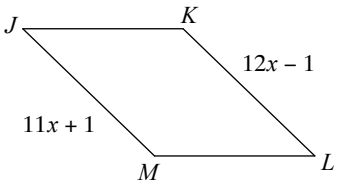
76) Find $m\angle T$



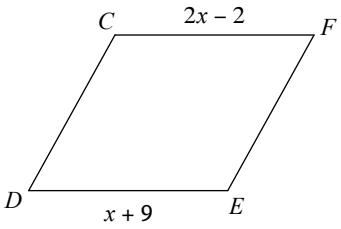
77) Find LM



78) Find KL

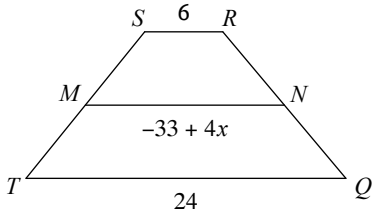


79) Find ED

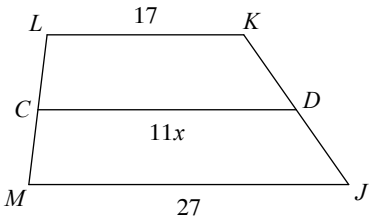


Solve for x. Each figure is a trapezoid.

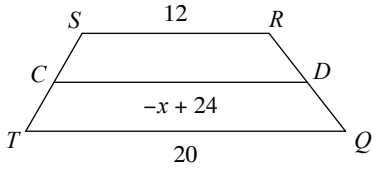
80)



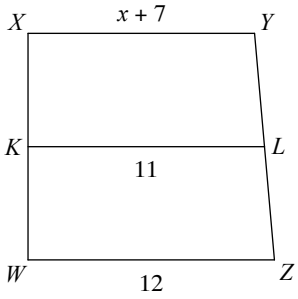
81)



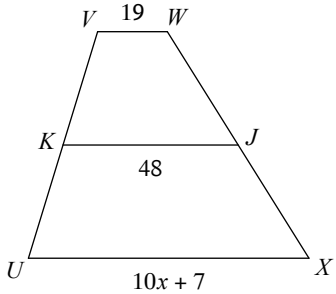
82)



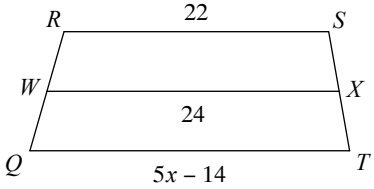
83)



84)

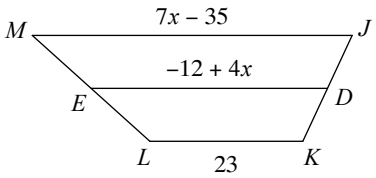


85)

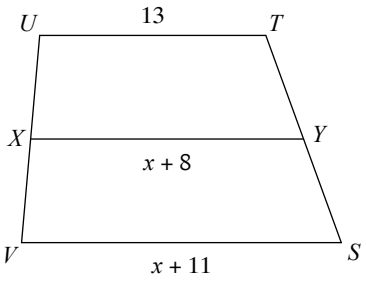


Find the length of the base indicated for each trapezoid.

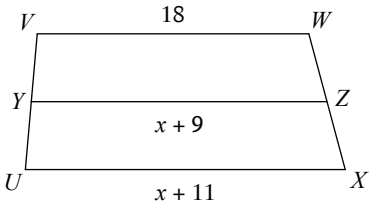
86) Find *JM*



87) Find *VS*

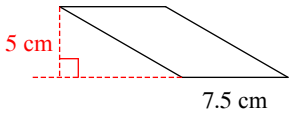


88) Find *UX*

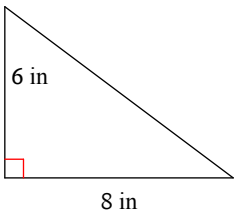


Find the area of each.

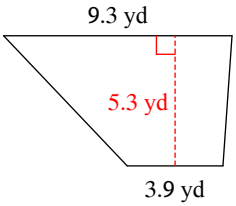
89)



90)

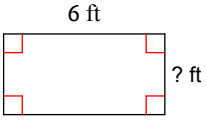


91)



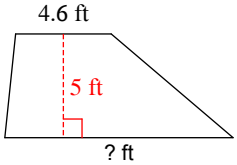
Find the missing measurement. Round your answer to the nearest tenth.

92)



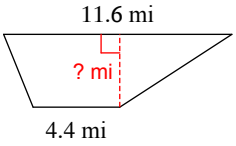
Area = 18 ft²

93)



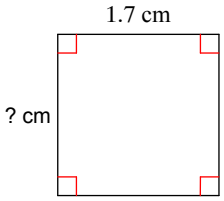
Area = 39 ft²

94)



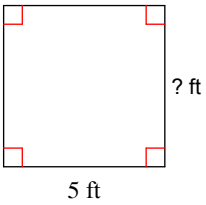
Area = 29.6 mi²

95)



Area = 2.9 cm²

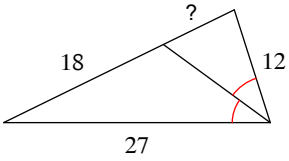
96)



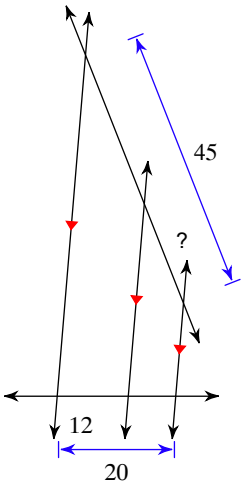
Area = 25 ft²

Find the missing length indicated.

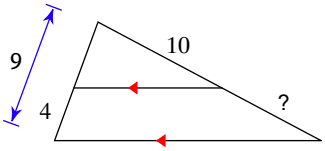
97)



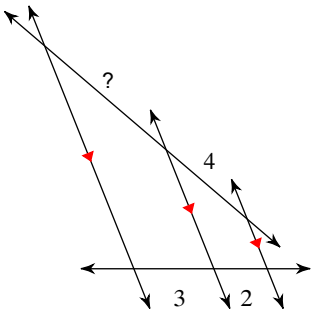
98)



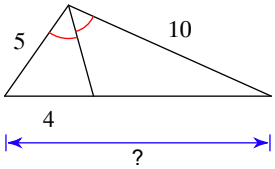
99)



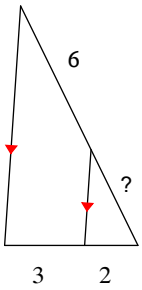
100)



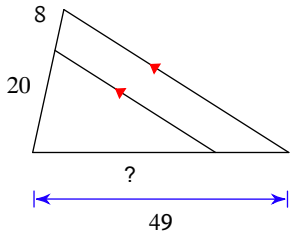
101)



102)

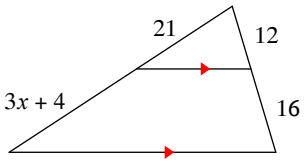


103)

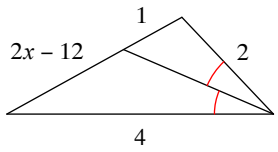


Solve for x.

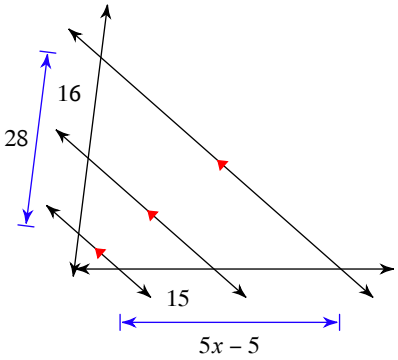
104)



105)

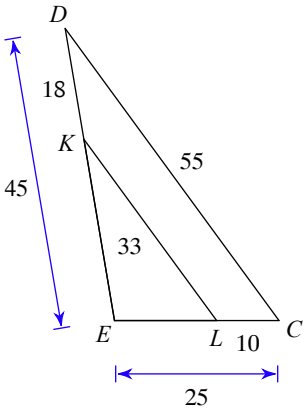


106)



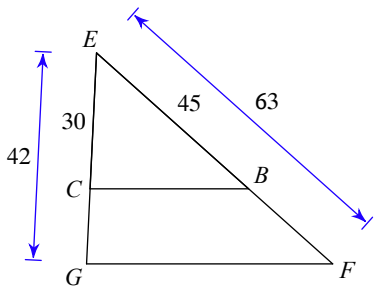
State if the triangles in each pair are similar. If so, state how you know they are similar and complete the similarity statement.

107)



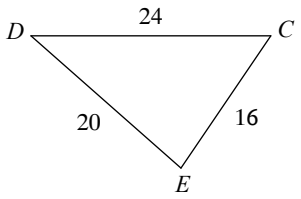
$\triangle EDC \sim$ _____

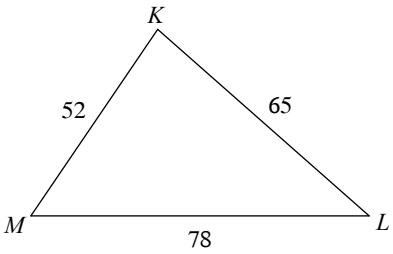
108)



$\triangle EFG \sim$ _____

109)

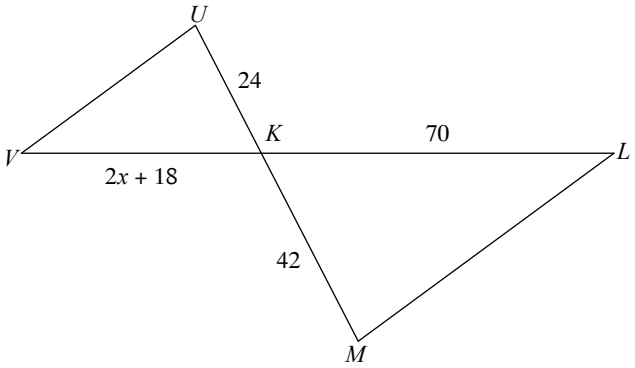




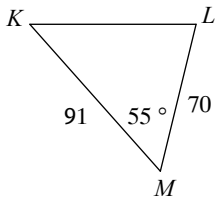
$\triangle KLM \sim$ _____

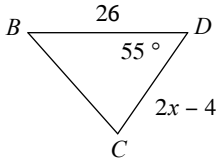
Solve for x. The triangles in each pair are similar.

110) $\triangle KLM \sim \triangle KVU$

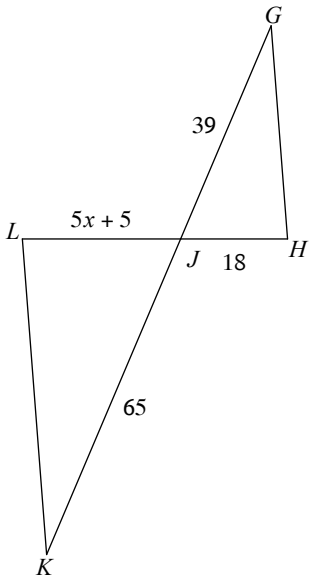


111) $\triangle MLK \sim \triangle DCB$



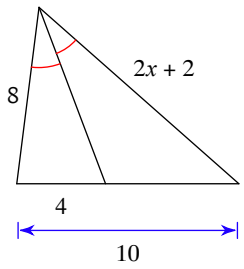


112) $\triangle JKL \sim \triangle JGH$

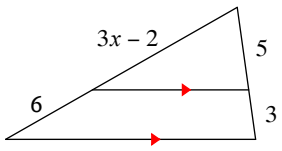


Solve for x.

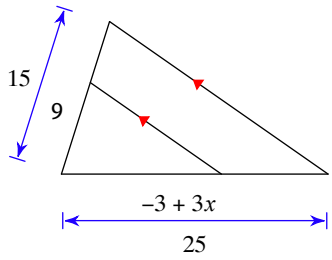
113)



114)

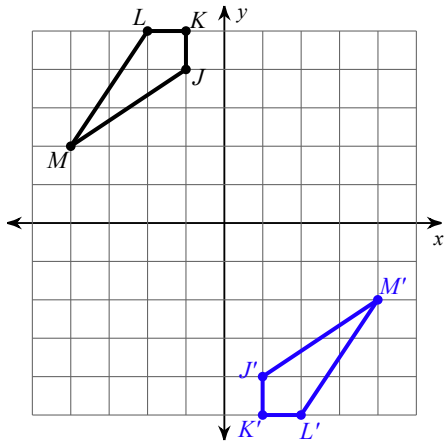


115)

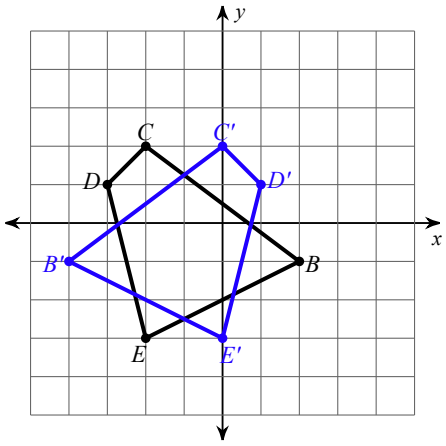


Write a rule to describe each transformation.

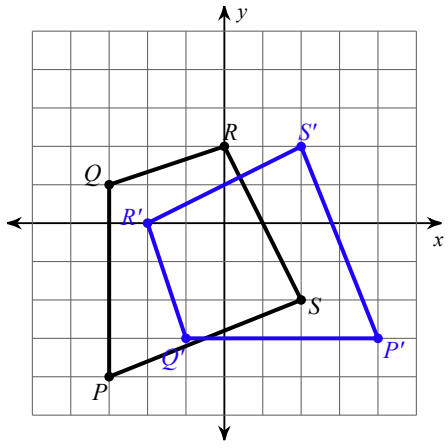
116)



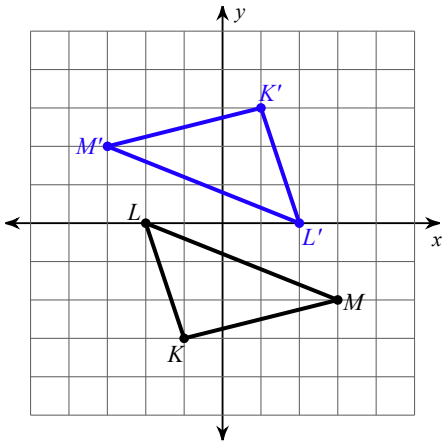
117)



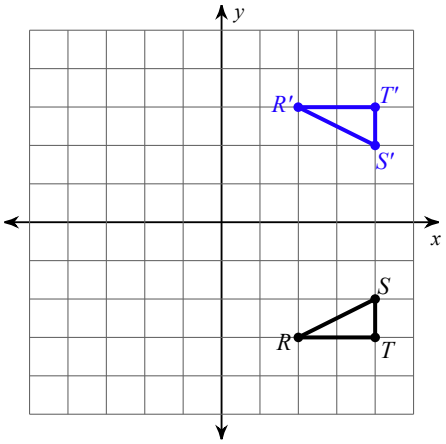
118)



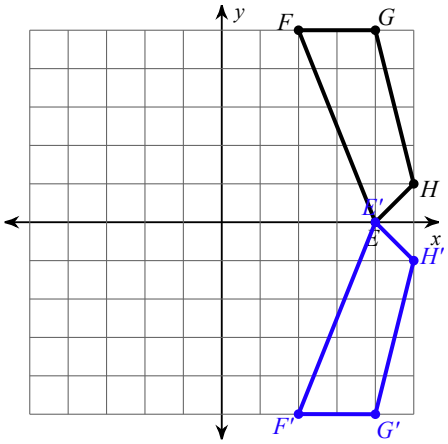
119)



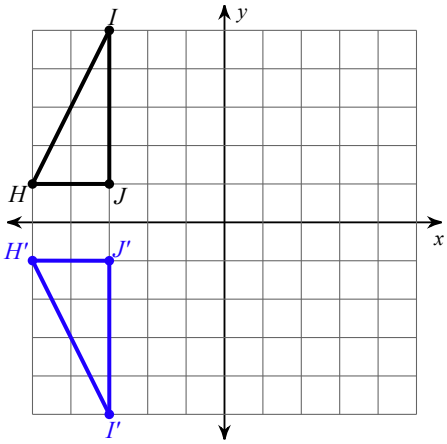
120)



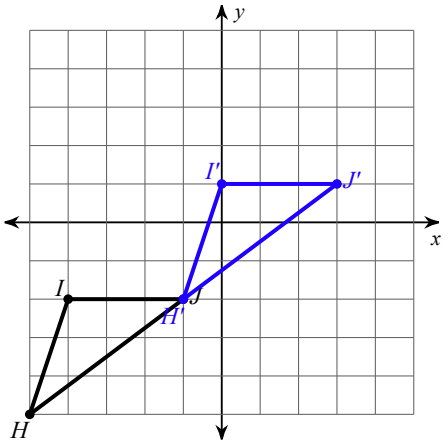
121)



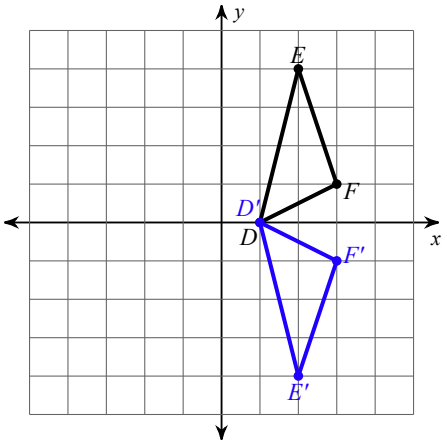
122)



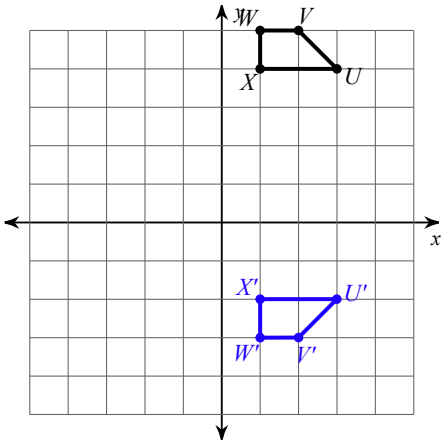
123)



124)



125)



Answers to Distance Learning Spring 2020 (ID: 1)

1) $(x + 11)^2 + (y - 1)^2 = 1$
2) $(x + 5)^2 + (y - 14)^2 = 6$
3) $(x + 14)^2 + (y + 3)^2 = 34$
4) $(x - 2)^2 + (y - 7)^2 = 10$
5) 144π m²
6) 49π mi²
7) 121π ft²
8) 64π cm²
9) Center: $(-7, -12)$ Radius: 2
10) Center: $(8, -10)$ Radius: 6
11) Not tangent
12) Not tangent
13) Not tangent
14) 17
15) 7.5
16) 8.4
17) 225°
18) 100°
19) 85°
20) 145°
21) 50°
22) 50°
23) 129°
24) 84°
25) 52°
26) 59°
27) 78°
28) 92°
29) $x = 2\sqrt{2},\ y = 2$
30) $u = \frac{3\sqrt{3}}{2},\ v = \frac{3}{2}$
31) $x = 2\sqrt{10},\ y = 2\sqrt{5}$
32) $a = 6,\ b = 3\sqrt{2}$
33) $u = 9\sqrt{2},\ v = 9$
34) $x = 8,\ y = 4$
35) $x = 18,\ y = 9$
36) $x = 6,\ y = 6$
37) $m = 3\sqrt{3},\ n = 3$
38) $a = 6,\ b = 3$
39) $a = 2\sqrt{3},\ b = \sqrt{3}$
40) $u = 4,\ v = 2\sqrt{3}$
41) $x = 2\sqrt{3},\ y = 2$
42) $x = 14,\ y = 7\sqrt{3}$
43) $x = \frac{16\sqrt{3}}{3},\ y = \frac{8\sqrt{3}}{3}$
44) $x = \frac{7\sqrt{2}}{2},\ y = \frac{7\sqrt{2}}{2}$
45) $x = 2\sqrt{3},\ y = 3$
46) $x = 4\sqrt{2},\ y = \frac{4\sqrt{6}}{3}$
47) 2130.1
48) 385.5
49) 20.5
50) 291.5
51) 269
52) 1638.4
53) 124.2
54) 50.6
55) 70.6
56) 836.1
57) $\frac{4}{5}$
58) $\frac{40}{41}$
59) $\frac{3}{4}$
60) $\frac{12}{13}$
61) $\frac{15}{17}$
62) $\frac{5}{12}$
63) $\frac{4}{5}$
64) 62°
65) 71°
66) 58°
67) 31°
68) 17°
69) 30°
70) 31°
71) 94°
72) 90°
73) 70°
74) 125°
75) 134°
76) 116°
77) 20
78) 23
79) 20
80) 12
81) 2
82) 8
83) 3
84) 7
85) 8
86) 49
87) 19
88) 22
89) 37.5 cm²
90) 24 in²
91) 34.98 yd²
92) 3 ft
93) 11 ft
94) 3.7 mi
95) 1.7 cm
96) 5 ft
97) 8
98) 18
99) 8
100) 6
101) 12
102) 4
103) 35
104) 8
105) 7
106) 8
107) similar; SSS and SAS similarity; $\triangle EKL$
108) similar; SAS similarity; $\triangle EBC$
109) similar; SSS similarity; $\triangle EDC$
110) 11
111) 12
112) 5
113) 5
114) 4
115) 6
116) rotation 180° about the origin
117) reflection across $x = -1$
118) rotation 90° counterclockwise about the origin
119) rotation 180° about the origin
120) reflection across the x-axis
121) reflection across the x-axis
122) reflection across the x-axis
123) translation: $(4, 3)$
124) reflection across the x-axis
125) reflection across $y = 1$