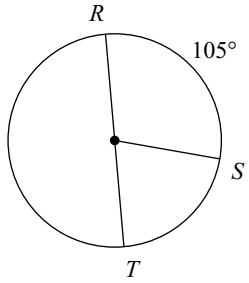
Honrs Math 3

Geometry Review

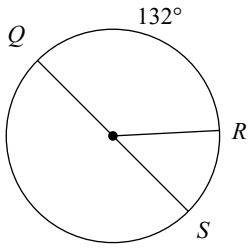
Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

1) $m\widehat{ST}$



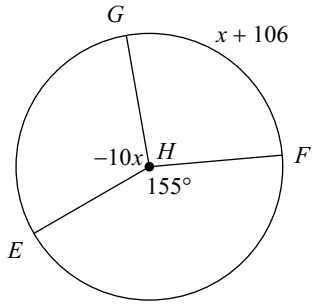
A) 75° B) 85°
C) 87° D) 70°

2) $m\widehat{RSQ}$



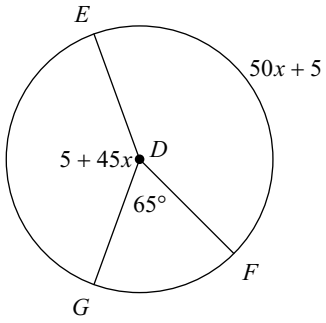
A) 228° B) 55°
C) 101° D) 40°

3) $m\angle GHF$



A) 95° B) 94°
C) 125° D) 96°

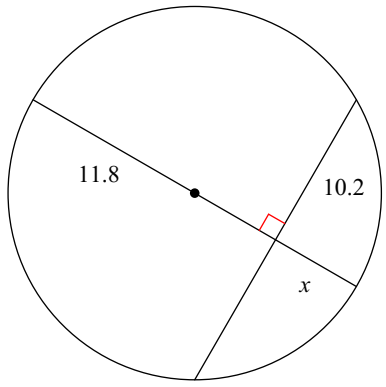
4) $m\angle EDF$



A) 45° B) 110°
C) 155° D) 112°

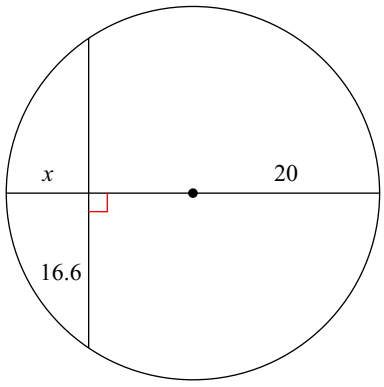
Find the length of the segment indicated. Round your answer to the nearest tenth if necessary.

5)



A) 7.1 B) 5.9
C) 3.3 D) 4.1

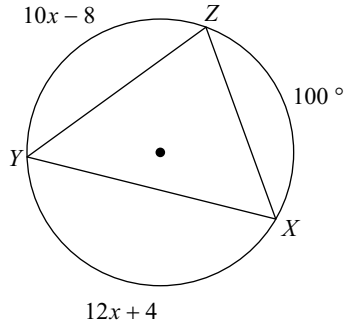
6)



A) 8.8 B) 12.1
C) 6.8 D) 4.8

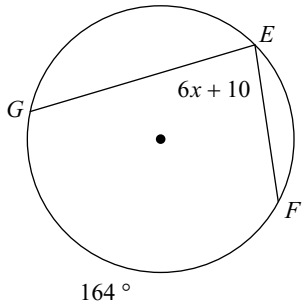
Solve for *x*.

7)



A) 15 B) 13
C) 8 D) 12

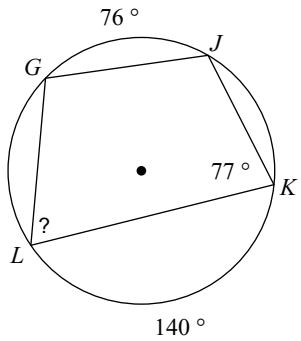
8)



A) 11 B) 12
C) 0 D) 2

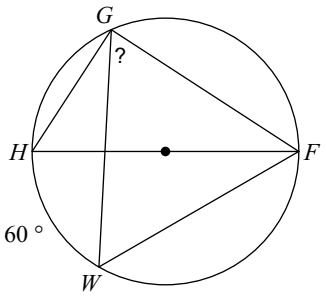
Find the measure of the arc or angle indicated.

9)



A) 66° B) 71°
C) 98° D) 89°

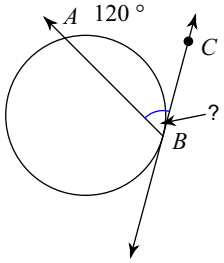
10)



A) 52° B) 60°
C) 89° D) 53°

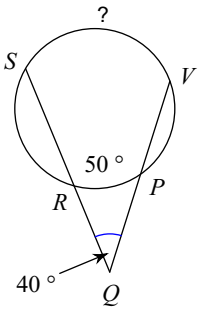
Find the measure of the arc or angle indicated. Assume that lines which appear tangent are tangent.

11)



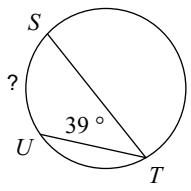
A) 80° B) 78°
C) 50° D) 60°

12)



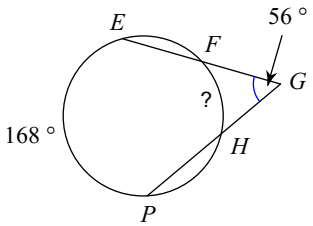
A) 165° B) 150°
C) 114° D) 130°

13)



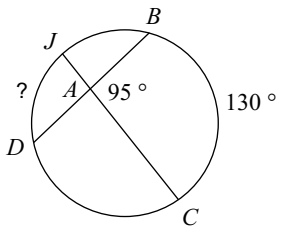
A) 78° B) 61°
C) 43° D) 46°

14)



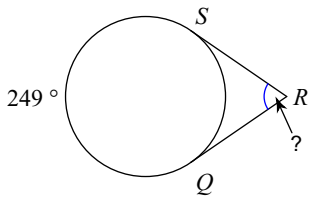
A) 43° B) 56°
C) 57° D) 34°

15)



A) 68° B) 60°
C) 80° D) 85°

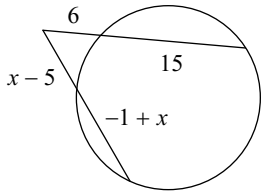
16)



A) 51° B) 69°
C) 61° D) 48°

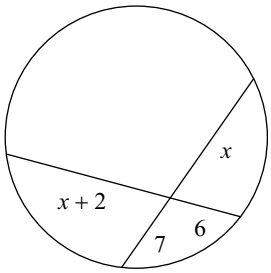
Solve for *x*. Assume that lines which appear tangent are tangent.

17)



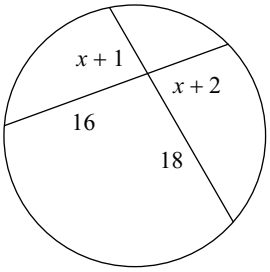
A) 12 B) 8
C) 6 D) 4

18)



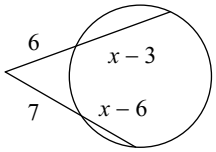
A) 12 B) 0
C) 7 D) 1

19)



A) 9 B) 7
C) 2 D) 8

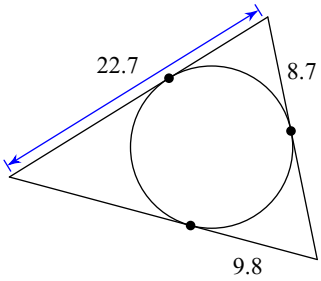
20)



A) 3 B) 11
C) 2 D) 5

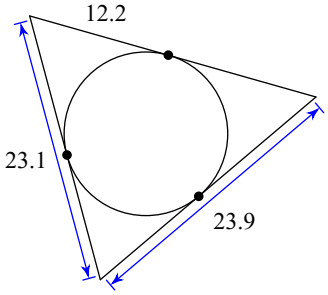
Find the perimeter of each polygon. Assume that lines which appear to be tangent are tangent.

21)



A) 65 B) 74.9
C) 78 D) 75.6

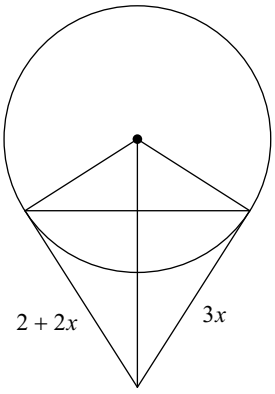
22)



A) 72.2 B) 90.6
C) 32.7 D) 85.2

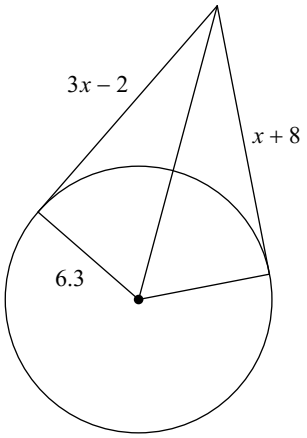
Solve for *x*. Assume that lines which appear to be tangent are tangent.

23)



A) 2 B) 12
C) 1 D) 11

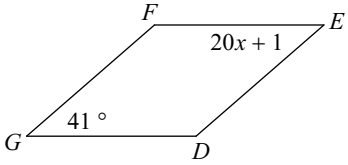
24)



A) 1 B) 5
C) 3 D) 6

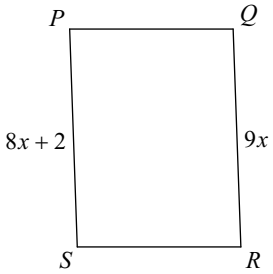
Solve for *x*. Each figure is a parallelogram.

25)



A) 12 B) 2
C) 6 D) 1

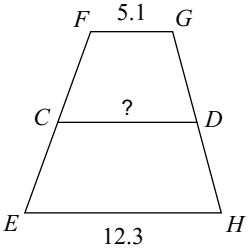
26)



A) 2 B) 3
C) 0 D) 1

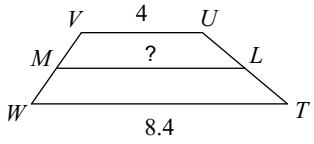
Find the length of the median of each trapezoid.

27)



A) 8.3 B) 11.9
C) 8.5 D) 8.7

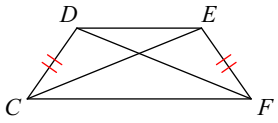
28)



A) 7.2 B) 6.2
C) 4.1 D) 5.4

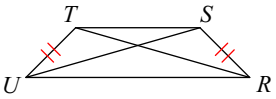
Solve for x. Each figure is a trapezoid.

29) $DF = 18$
$CE = 21x - 3$



A) 1 B) 6
C) 11 D) 2

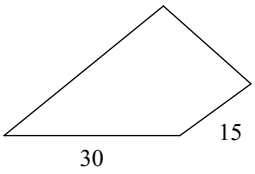
30) $US = 8$
$TR = -2x + 22$

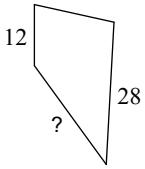


A) 7 B) 2
C) 5 D) 6

The polygons in each pair are similar. Find the missing side length.

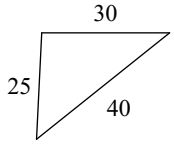
31)

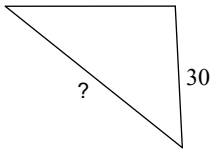




A) 24 B) 16
C) 17 D) 25

32)

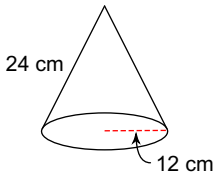


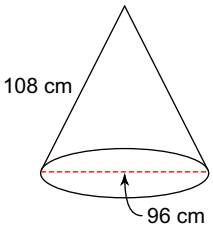


A) 19 B) 33
C) 48 D) 65

Determine if each pair of solids is similar.

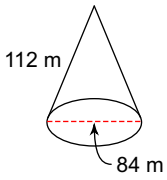
33)

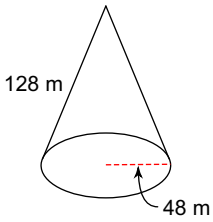




A) Yes B) No

34)

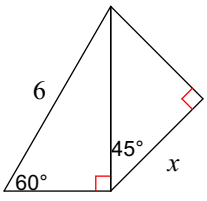




A) Yes B) No

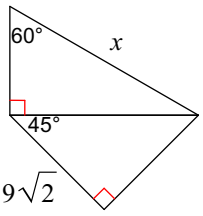
Find the missing side lengths. Leave your answers as radicals in simplest form.

35)



A) 8 B) $\frac{3\sqrt{6}}{2}$
C) $4\sqrt{3}$ D) $3\sqrt{3}$

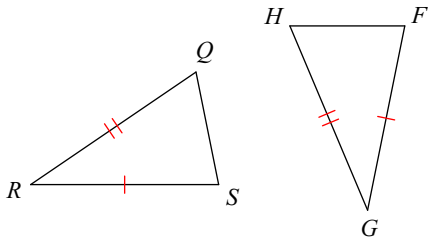
36)



A) $12\sqrt{3}$ B) $12\sqrt{6}$
C) $\frac{3\sqrt{6}}{2}$ D) $\frac{9\sqrt{6}}{2}$

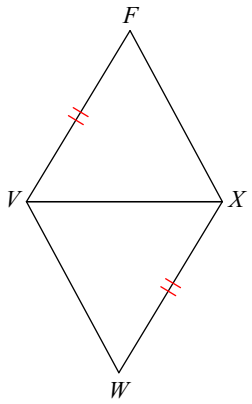
State what additional information is required in order to know that the triangles are congruent for the reason given.

37) SSS



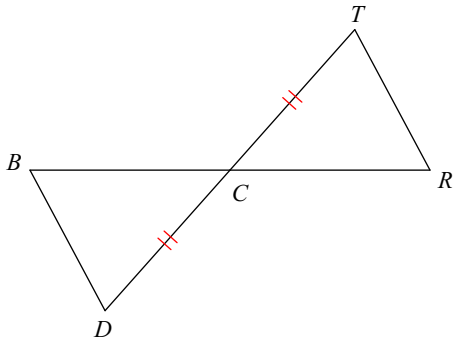
A) $\overline{SR} \cong \overline{FG}$ or $\overline{QS} \cong \overline{HF}$
B) $\angle S \cong \angle F$
C) $\overline{QS} \cong \overline{HF}$
D) $\overline{RQ} \cong \overline{GH}$

38) SSS



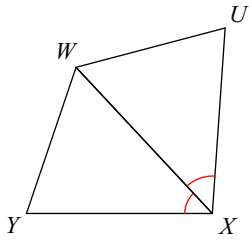
A) $\overline{XW} \cong \overline{VF}$ or $\overline{WV} \cong \overline{FX}$
B) $\overline{WV} \cong \overline{FX}$
C) $\angle WVX \cong \angle FXV$
D) $\overline{VX} \cong \overline{XV}$

39) AAS



A) $\angle BCD \cong \angle RCT$
B) $\angle B \cong \angle R$
C) $\overline{DB} \cong \overline{TR}$
D) $\overline{CD} \cong \overline{CT}$

40) ASA



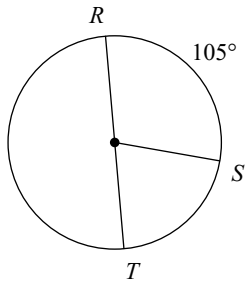
A) $\overline{WX} \cong \overline{WX}$
B) $\angle YWX \cong \angle UWX$
C) $\overline{WX} \cong \overline{WX}$ or $\overline{YW} \cong \overline{UW}$
D) $\overline{YW} \cong \overline{UW}$

Honrs Math 3

Geometry Review

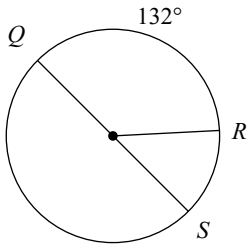
Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

1) $m\widehat{ST}$



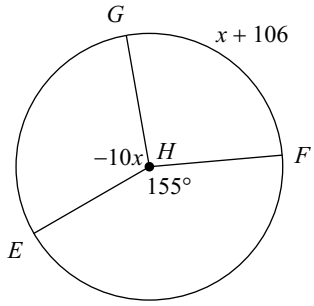
*A) 75° B) 85°
C) 87° D) 70°

2) $m\widehat{RSQ}$



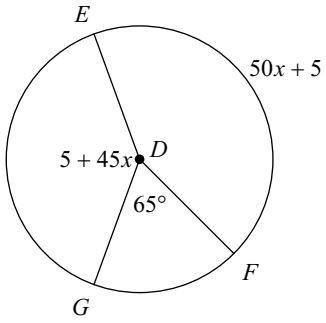
*A) 228° B) 55°
C) 101° D) 40°

3) $m\angle GHF$



*A) 95° B) 94°
C) 125° D) 96°

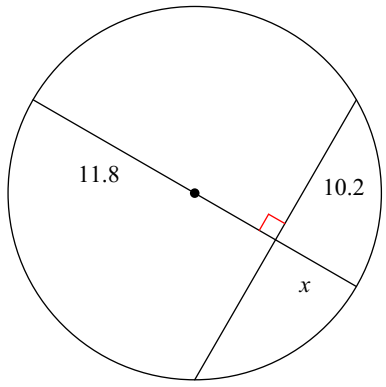
4) $m\angle EDF$



A) 45° B) 110°
*C) 155° D) 112°

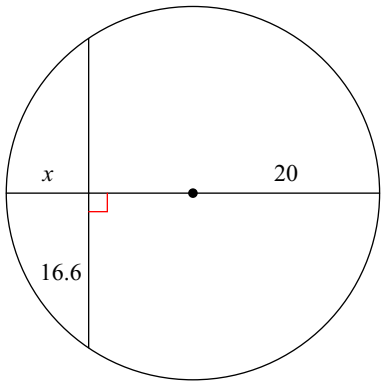
Find the length of the segment indicated. Round your answer to the nearest tenth if necessary.

5)



A) 7.1 *B) 5.9
C) 3.3 D) 4.1

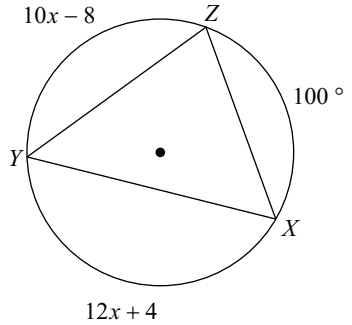
6)



*A) 8.8 B) 12.1
C) 6.8 D) 4.8

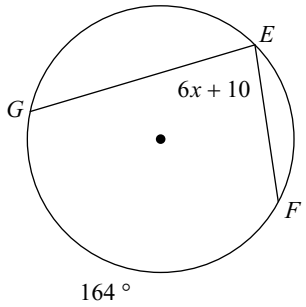
Solve for *x*.

7)



A) 15 B) 13
C) 8 *D) 12

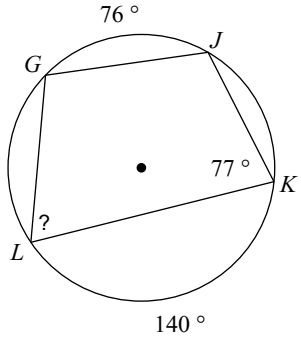
8)



A) 11 *B) 12
C) 0 D) 2

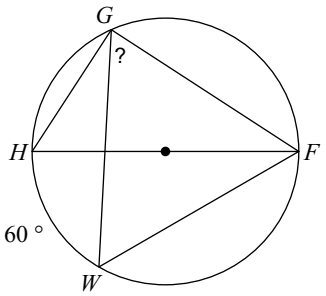
Find the measure of the arc or angle indicated.

9)



A) 66° *B) 71°
C) 98° D) 89°

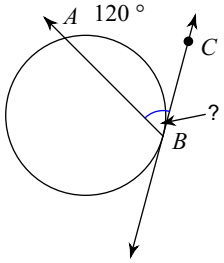
10)



A) 52° *B) 60°
C) 89° D) 53°

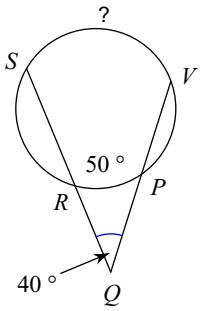
Find the measure of the arc or angle indicated. Assume that lines which appear tangent are tangent.

11)



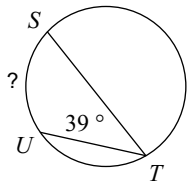
A) 80° B) 78°
C) 50° *D) 60°

12)



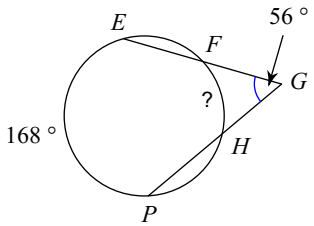
A) 165° B) 150°
C) 114° *D) 130°

13)



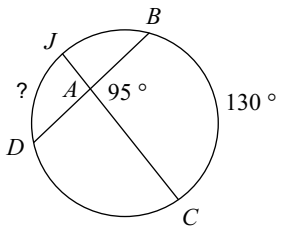
*A) 78° B) 61°
C) 43° D) 46°

14)



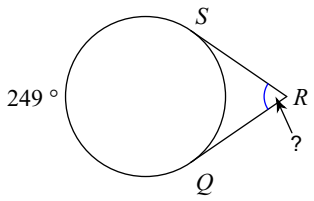
A) 43° *B) 56°
C) 57° D) 34°

15)



A) 68° *B) 60°
C) 80° D) 85°

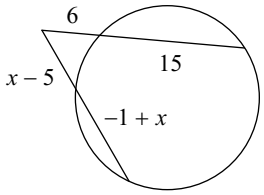
16)



A) 51° *B) 69°
C) 61° D) 48°

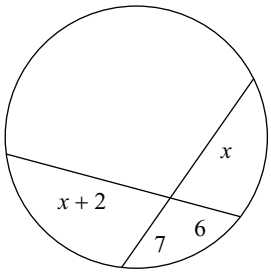
Solve for *x*. Assume that lines which appear tangent are tangent.

17)



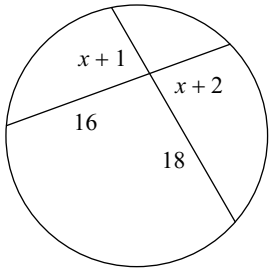
*A) 12 B) 8
C) 6 D) 4

18)



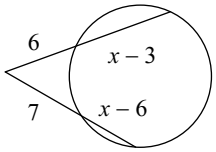
*A) 12 B) 0
C) 7 D) 1

19)



A) 9 *B) 7
C) 2 D) 8

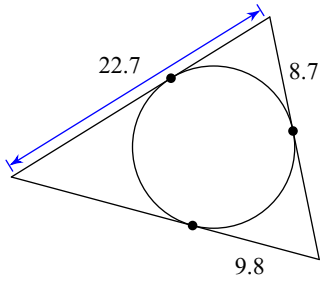
20)



A) 3 *B) 11
C) 2 D) 5

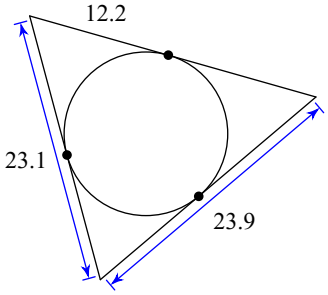
Find the perimeter of each polygon. Assume that lines which appear to be tangent are tangent.

21)



*A) 65 B) 74.9
C) 78 D) 75.6

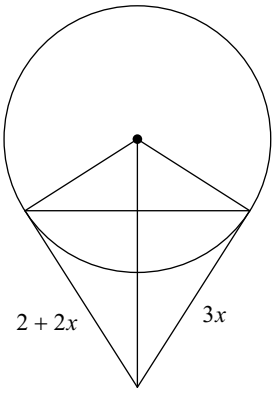
22)



*A) 72.2 B) 90.6
C) 32.7 D) 85.2

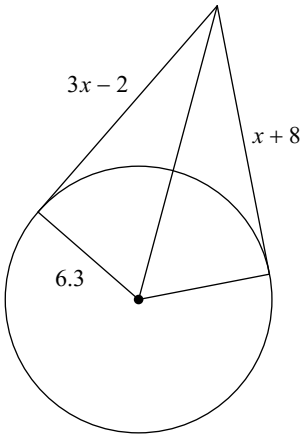
Solve for *x*. Assume that lines which appear to be tangent are tangent.

23)



*A) 2 B) 12
C) 1 D) 11

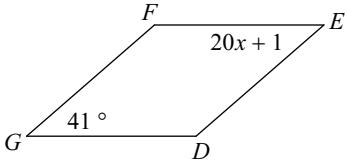
24)



A) 1 *B) 5
C) 3 D) 6

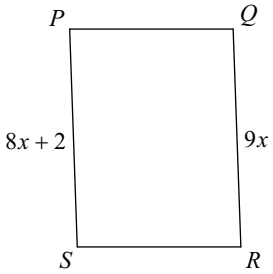
Solve for *x*. Each figure is a parallelogram.

25)



A) 12 *B) 2
C) 6 D) 1

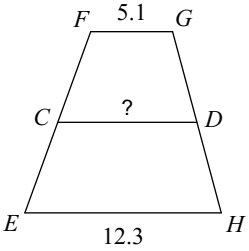
26)



*A) 2 B) 3
C) 0 D) 1

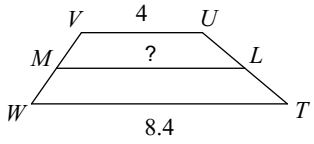
Find the length of the median of each trapezoid.

27)



A) 8.3 B) 11.9
C) 8.5 *D) 8.7

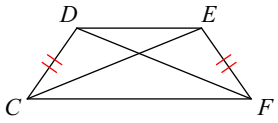
28)



A) 7.2 *B) 6.2
C) 4.1 D) 5.4

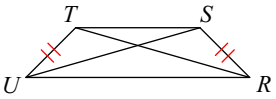
Solve for x. Each figure is a trapezoid.

29) $DF = 18$
$CE = 21x - 3$



*A) 1 B) 6
C) 11 D) 2

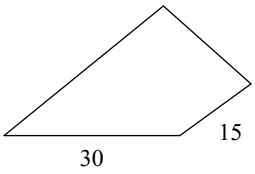
30) $US = 8$
$TR = -2x + 22$

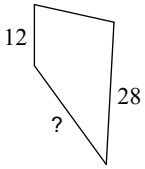


*A) 7 B) 2
C) 5 D) 6

The polygons in each pair are similar. Find the missing side length.

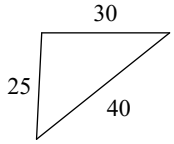
31)

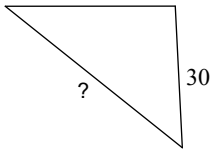




*A) 24 B) 16
C) 17 D) 25

32)

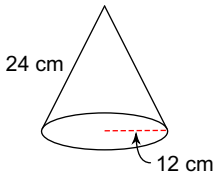


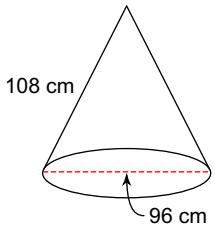


A) 19 B) 33
*C) 48 D) 65

Determine if each pair of solids is similar.

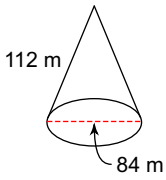
33)

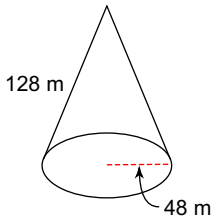




A) Yes *B) No

34)

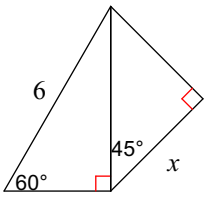




*A) Yes B) No

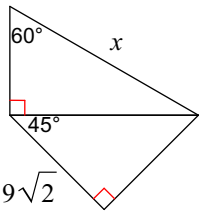
Find the missing side lengths. Leave your answers as radicals in simplest form.

35)



A) 8 *B) $\frac{3\sqrt{6}}{2}$
C) $4\sqrt{3}$ D) $3\sqrt{3}$

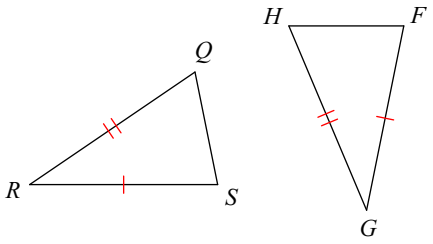
36)



*A) $12\sqrt{3}$ B) $12\sqrt{6}$
C) $\frac{3\sqrt{6}}{2}$ D) $\frac{9\sqrt{6}}{2}$

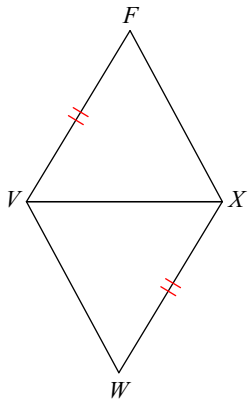
State what additional information is required in order to know that the triangles are congruent for the reason given.

37) SSS



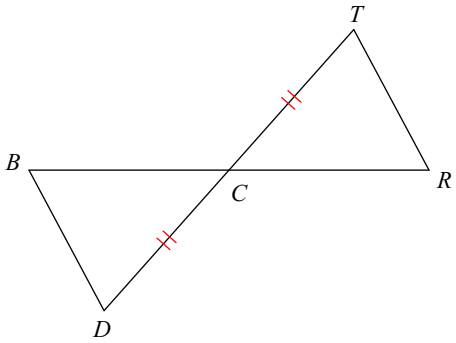
A) $\overline{SR} \cong \overline{FG}$ or $\overline{QS} \cong \overline{HF}$
B) $\angle S \cong \angle F$
*C) $\overline{QS} \cong \overline{HF}$
D) $\overline{RQ} \cong \overline{GH}$

38) SSS



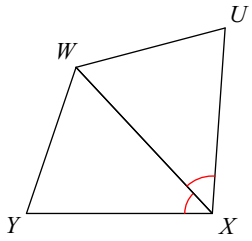
A) $\overline{XW} \cong \overline{VF}$ or $\overline{WV} \cong \overline{FX}$
*B) $\overline{WV} \cong \overline{FX}$
C) $\angle WVX \cong \angle FXV$
D) $\overline{VX} \cong \overline{XV}$

39) AAS



A) $\angle BCD \cong \angle RCT$
*B) $\angle B \cong \angle R$
C) $\overline{DB} \cong \overline{TR}$
D) $\overline{CD} \cong \overline{CT}$

40) ASA



A) $\overline{WX} \cong \overline{WX}$
*B) $\angle YWX \cong \angle UWX$
C) $\overline{WX} \cong \overline{WX}$ or $\overline{YW} \cong \overline{UW}$
D) $\overline{YW} \cong \overline{UW}$