

(#1)

GEOMETRY CP SPRING REVIEW

Solve each proportion by using cross products.

7-1

5. $\frac{9}{28} = \frac{x}{84}$

6. $\frac{3}{18} = \frac{4x}{7}$

7. $\frac{x+5}{7} = \frac{x+3}{5}$

Use a proportion to solve each problem.

8. If two cassettes cost \$14.50, how much will 15 cassettes cost?

9. If a 6-foot post casts a shadow that is 8 feet long, how tall is an antenna that casts a 60-foot shadow at the same time?

7-2

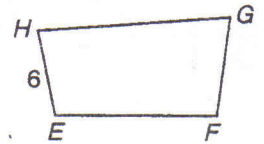
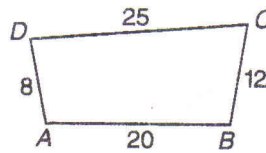
If quadrilateral ABCD is similar to quadrilateral EFGH, find each of the following.

1. scale factor of ABCD to EFGH

2. EF

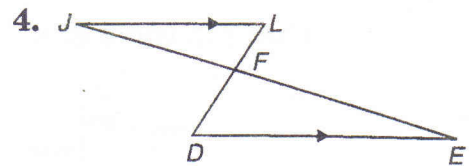
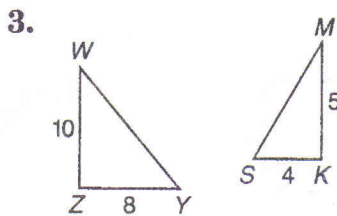
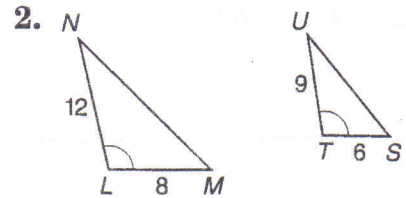
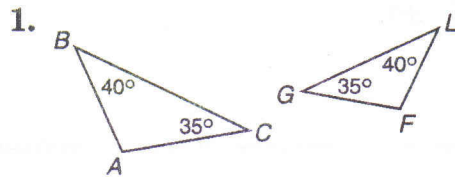
3. FG

4. GH



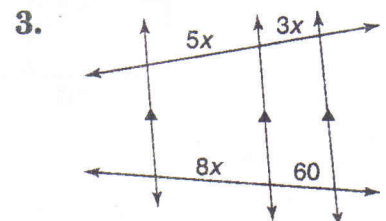
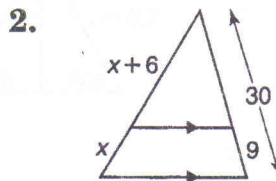
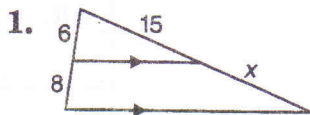
Determine whether each pair of triangles is similar. Give a reason for your answer.

7-3



Find the value of x.

7-4



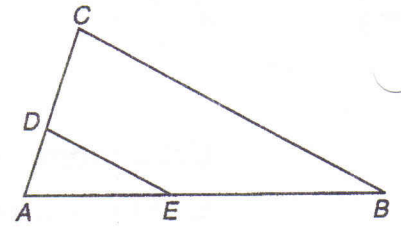
DO NOT WRITE ON REVIEW SHEETS

7-4

In $\triangle ABC$, find x so that $\overline{DE} \parallel \overline{CB}$.

4. $DC = 18, AD = 6,$
 $AE = 12, EB = x - 3$

5. $AC = 30, AD = 10,$
 $AE = 22, EB = x + 4$



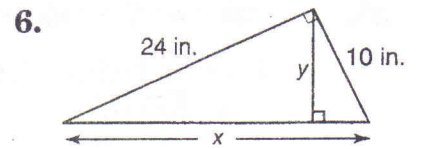
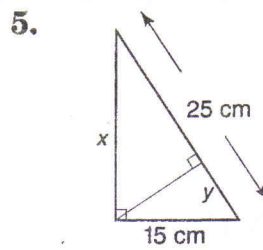
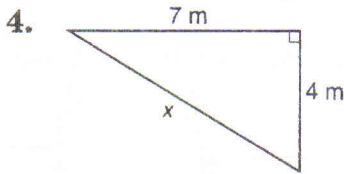
Find the geometric mean between each pair of numbers.

1. 3 and 10

2. 10 and 20

Find the values of x and y . Round to the nearest tenth.

8-1



Determine if the given measures are measures of the sides of a right triangle.

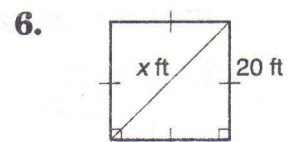
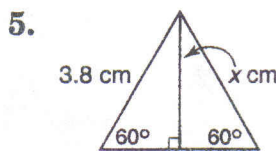
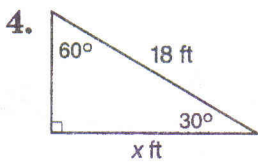
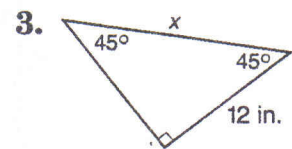
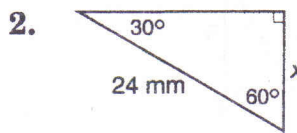
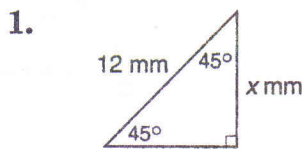
8-2

7. 18, 24, 30

8. 20, 30, 40

Find the value of x .

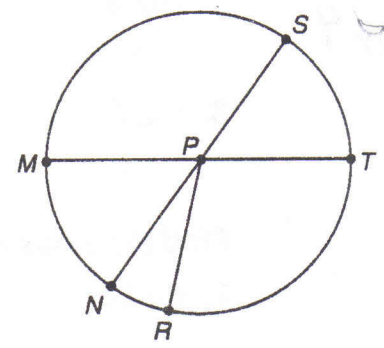
8-3



#3

Refer to $\odot P$ for Exercises 1–8. If \overline{SN} and \overline{MT} are diameters with $m\angle SPT = 51$ and $m\angle NPR = 29$, determine whether each arc is a minor arc, a major arc, or a semicircle. Then find the degree measure of each arc.

1. $m\widehat{NR}$
2. $m\widehat{ST}$
3. $m\widehat{TSR}$
4. $m\widehat{MST}$



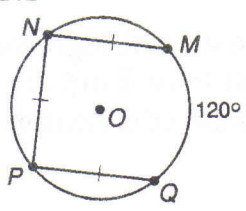
If $MT = 15$, find the length of each arc. Round to the nearest tenth.

5. \widehat{NR}
6. \widehat{ST}
7. \widehat{TSR}
8. \widehat{MST}

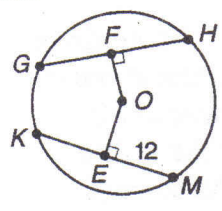
10-2

In each circle, O is the center. Find each measure.

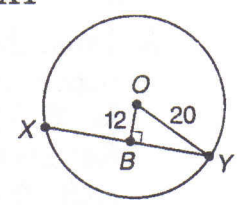
1. $m\widehat{NP}$



2. KM



3. XY

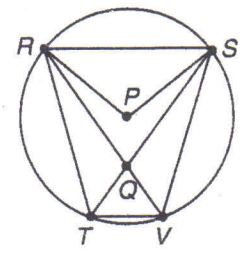


10-3

4. Suppose a chord is 20 inches long and is 24 inches from the center of the circle. Find the length of the radius.

5. Suppose a chord of a circle is 5 inches from the center and is 24 inches long. Find the length of the radius.

10-4



In $\odot P$, $m\widehat{SV} = 86$ and $m\angle RPS = 110$. Find each measure.

4. $m\angle PRS$
5. $m\widehat{RT}$
6. $m\angle RVT$
7. $m\angle SVT$
8. $m\angle TQV$
9. $m\angle RQT$
10. $m\angle QRT$
11. $m\widehat{RS}$

#4

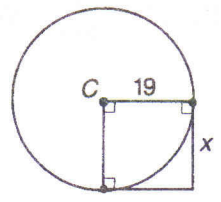
GEOM CP Spring REVIEW

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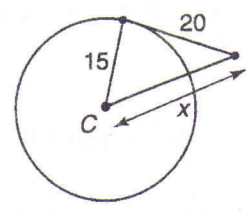
For each $\odot C$, find the value of x . Assume that segments that appear to be tangent are tangent.

10-5

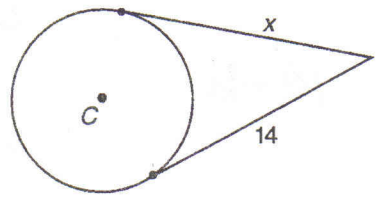
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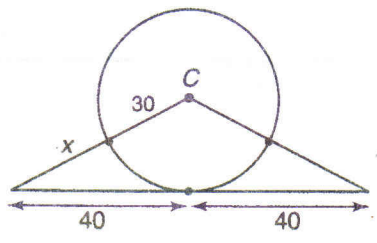
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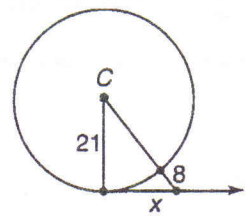
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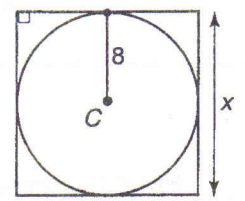
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5.



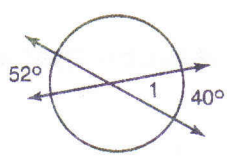
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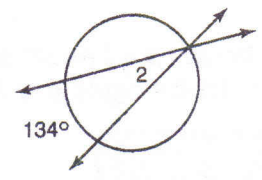
Find the measure of each numbered angle.

10-6

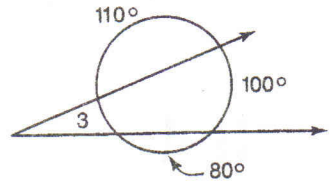
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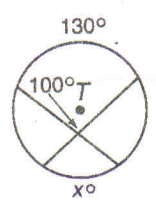


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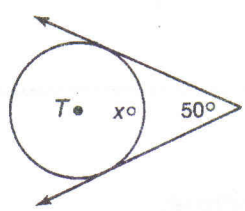


Given $\odot T$, find the value of x .

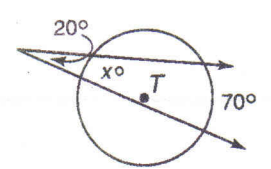
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5.



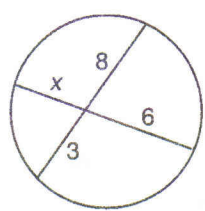
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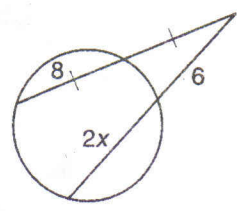
Find the value of x to the nearest tenth. Assume segments that appear tangent to be tangent.

10-7

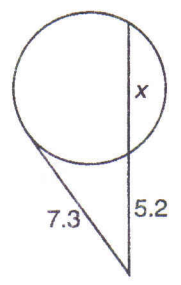
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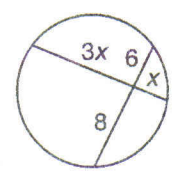
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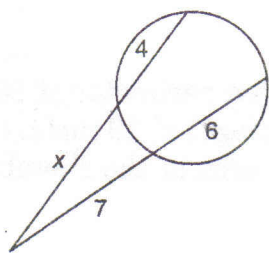
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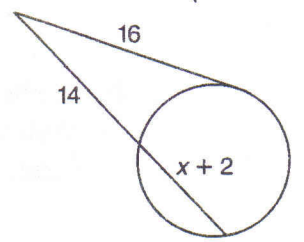
4.



5.



6.



#5

Determine the coordinates of the center and the measure of the radius for each circle whose equation is given.

1. $(x - 7.2)^2 + (y + 3.4)^2 = 14.44$

2. $(x + \frac{1}{2})^2 + (y - 2)^2 = \frac{16}{25}$

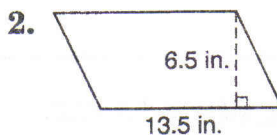
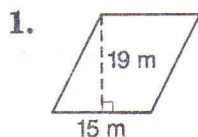
10-8

3. $(x - 6)^2 + (y - 3)^2 - 25 = 0$

Graph each circle whose equation is given. Label the center and measure of the radius on each graph.

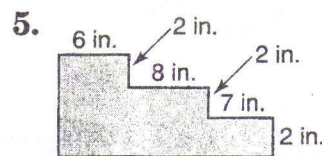
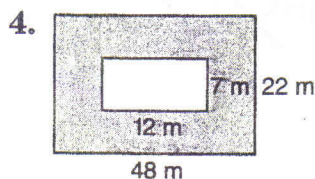
4. $(x - 2.5)^2 + (y + 1)^2 = 12.25$

Find the area of each figure.



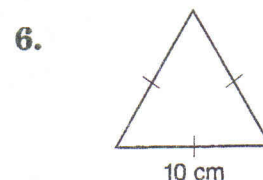
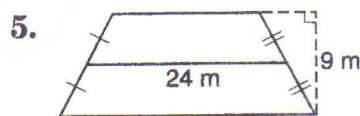
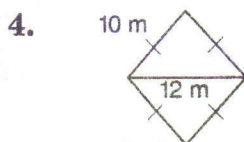
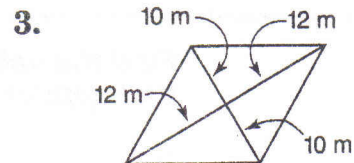
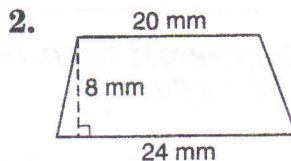
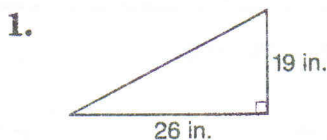
Find the area of each shaded region. Assume that angles that appear to be right are right angles.

11-1



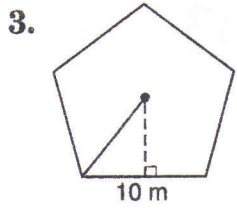
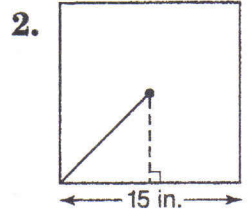
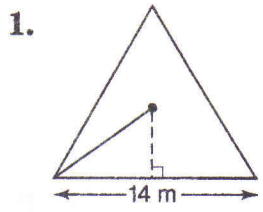
Find the area of each figure.

11-2

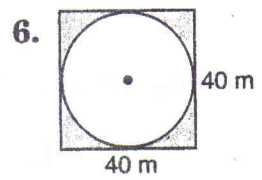


8. A rhombus has a perimeter of 100 meters and a diagonal 30 meters long. Find the area of the rhombus.

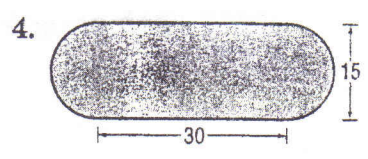
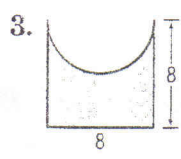
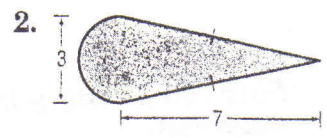
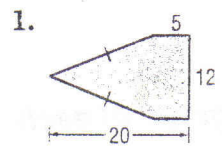
Find the apothem, area, and perimeter of each regular polygon. Round your answers to the nearest tenth.



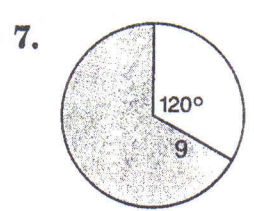
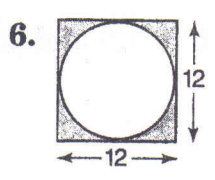
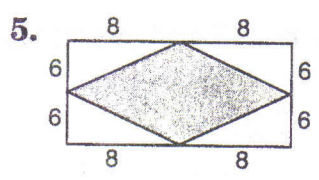
Find the area of each shaded region. Assume that all polygons are regular. Round your answers to the nearest tenth.



Find the area of each figure. Round to the nearest tenth if necessary.



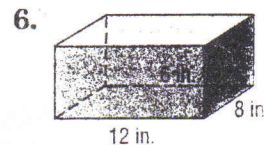
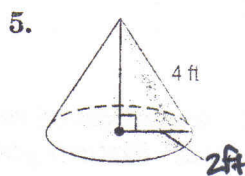
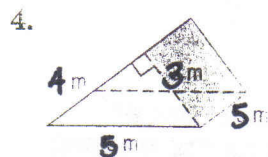
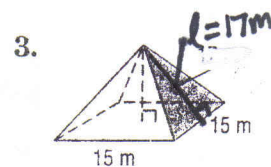
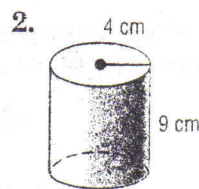
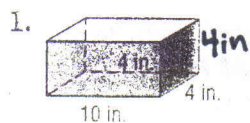
Find the probability that a point chosen at random in each figure lies in the shaded region. Round your answers to the nearest hundredth.



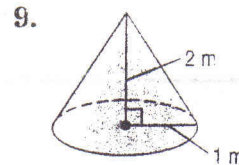
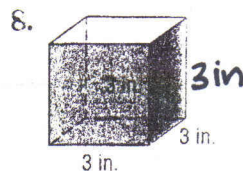
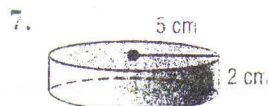
#7

CHAP
12 & 13

Find the surface area of each solid. Round to the nearest tenth.



Find the volume of each solid. Round to the nearest tenth.



Ch. 9

1. Find the image of \overline{UV} with $U(-3, 5)$ and $V(0, 8)$ under the translation $(x, y) \rightarrow (x + 2, y - 5)$.
2. Find the image of \overline{CD} with $C(0, 4)$ and $D(3, 4)$ under a rotation of 90° counterclockwise about the origin.
3. Find the coordinates of Q'' if $\triangle OPQ$ with $O(4, 2)$, $P(5, 0)$, and $Q(1, -2)$ is reflected in the x -axis and then in the y -axis.
4. Determine whether a regular 15-gon tessellates the plane. Explain.
5. If $CD = 3$ and $C''D'' = 8$, is the dilation an *enlargement*, *reduction*, or *congruence transformation*?