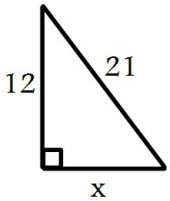
Spiral Review:

1. Solve for x.



$x^2+12^2=21^2$

$x^2+144=441$

$-144 \quad -144$

$\sqrt{x^2}=\sqrt{297}$

$\boxed{x=17.2}$

2. Find the sum of the interior angles of a octagon.

$S=(n-2)\cdot 180$

$=(8-2)\cdot 180$

$=6\cdot 180$

$\boxed{S=1080}$

3. Factor the quadratic.

a.) $x^2 - 4x - 5$

$-5 \quad 1 \quad -4$

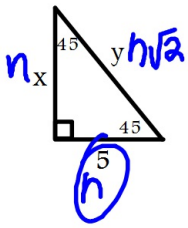
$\boxed{(x-5)(x+1)}$

b.) $x^2 + 6x + 8$

$8 \quad 4 \quad 2 \quad 6$

$\boxed{(x+4)(x+2)}$

4. Solve for x and y.



$n=5$

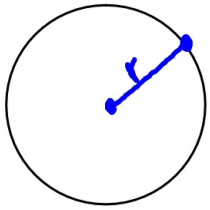
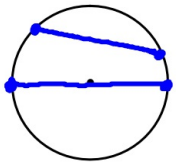
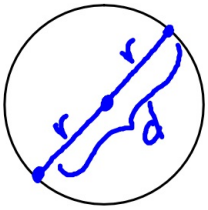
$x=5$

$y=5\sqrt{2}$

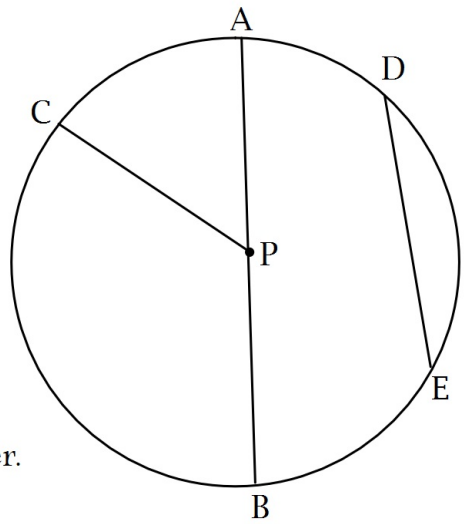
≈ 7.1

p.697 10.1 Circles and Circumference

Parts of a Circle:

A radius is a segment with endpoints at the center and on the circle.	
A chord is a segment with endpoints on the circle.	
A diameter of the circle is a chord that passes through the center and is made up of 2 radii.	

Example 1:



1. Name the circle.

   circle P, ⊙P

2. Name a radius.

   $\overline{PC}$

3. Name a chord.

   $\overline{DE}$, $\overline{AB}$

4. Name a diameter.

   $\overline{AB}$

5. Name a radius not drawn as part of a diameter.

   $\overline{CP}$

6. Suppose the diameter of the circle is 16cm. Find the radius. $\frac{16}{2} = 8cm$

7. If PC = 11 in, find AB.

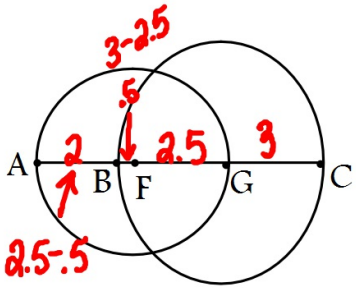
   (radius) (diameter)

   $11(2) = 22in$

Example 2: The diameters of ⊙F and ⊙G are 5 and 6 units. Find each measure.

1. BF

   .5



$\frac{5}{2} = 2.5$

$\frac{6}{2} = 3$

2. AB

   2

Example 3: Find the diameter and radius with the given circumference. Round to the nearest hundredth (**2 decimal places**).

$C = 2\pi r$, $C = \pi d$

1. C = 36 m

$C = \pi d$

$\frac{36}{\pi} = \frac{\pi d}{\pi}$

$\boxed{d = 11.46\text{m}}$

$r = \frac{11.46}{2}$

$\boxed{r = 5.73\text{m}}$

2. C = 12.2 ft

$\frac{12.2}{\pi} = d$

$\boxed{d = 3.88\text{ft}}$

$r = \frac{3.88}{2}$

$\boxed{r = 1.94\text{ft}}$

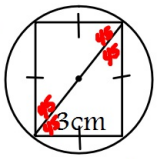
3. C = 81.3 cm

4. C = 5 yd

Example 4: Find the exact circumference of each circle.

no decimal

1.



Find diameter (hypotenuse)

$3^2 + 3^2 = d^2$

$9 + 9 = d^2$

$\sqrt{18} = \sqrt{d^2}$

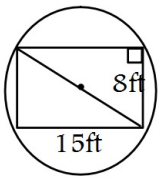
6 3

2 3

$3\sqrt{2} = d$

$\boxed{C = 3\sqrt{2}\pi\text{ cm}}$

2.



$8^2 + 15^2 = d^2$

$64 + 225 = d^2$

$\sqrt{289} = \sqrt{d^2}$

$d = 17$

$\boxed{C = 17\pi\text{ ft}}$

Turn -in:

Quick Check 10.1

HW:

p.701 (10-17, 19, 20, 22-32 evens, 36)