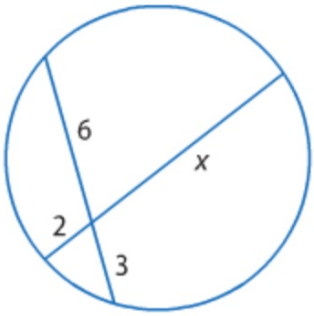
Geometry
Review Ch. 10

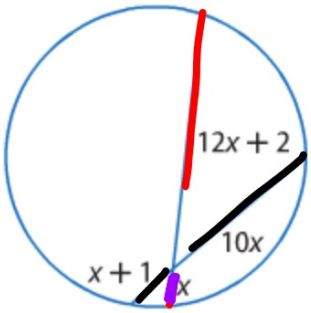
Quiz 10.7-10.8 today

Test Ch. 10 Thurs.

32.



33.



$2x=0$

~~$x=0$~~

$x-4=0$

$+4 \quad +4$

$x=4$

$10x(x+1) = x(12x+2)$

$10x^2+10x = 12x^2+2x$

$-10x^2-10x \quad -10x^2-10x$

$0 = 2x^2 - 8x$

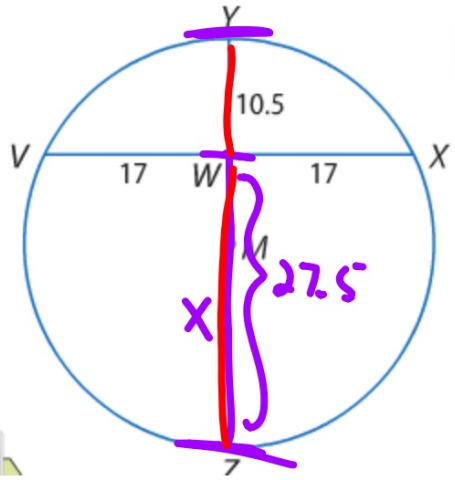
$\frac{}{2x} \quad \frac{}{2x}$

$0 = 2x(x-4)$

Find the diameter of circle *M*.

$yz =$

$d = 38$

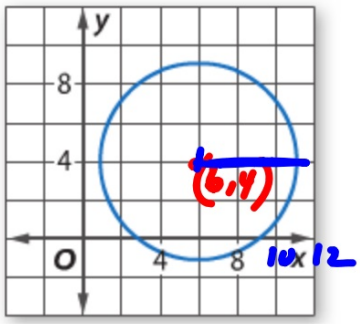


$10.5x = 17 \cdot 17$

$10.5x = 289$

$x = 27.5$

Write the equation of the circle graphed below.



$(x-6)^2+(y-4)^2=6^2$

$=36$

10-8 Equations of Circles

Write the equation of each circle.

35. center at (−2, 4), radius 5

$$(x-(-2))^2+(y-4)^2=5^2$$

$$(x+2)^2+(y-4)^2=25$$

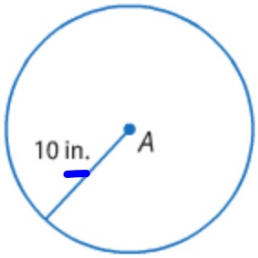
36. center at (1, 2), diameter 14

$(x-1)^2+(y-2)^2 = 49$

Quiz 10.7-10.8

Example 1

Find the circumference of $\odot A$.



$A = \pi r^2$

$C = \pi \cdot d$

$C = 20\pi$ in

$C = 62.83$ in

Find the diameter and radius of a circle with the given circumference. Round to the nearest hundredth.

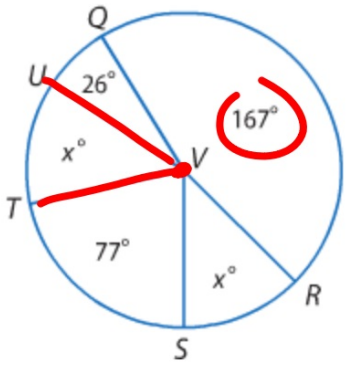
13. $C = 43$ cm

14. $C = 26.7$ yd

Example 2

$167 + 2x + 77 + 26 = 360$

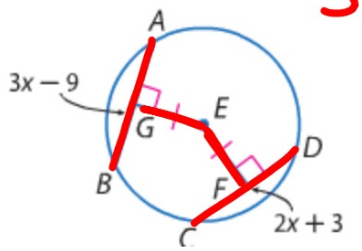
Find the value of x.



Example 3

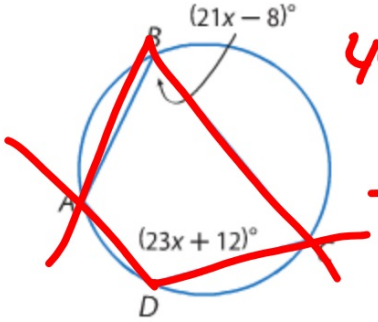
ALGEBRA In $\odot E$, $EG = EF$. Find AB.

$3x - 9 = 2x + 3$



Example 4

Find $m\angle D$ and $m\angle B$.

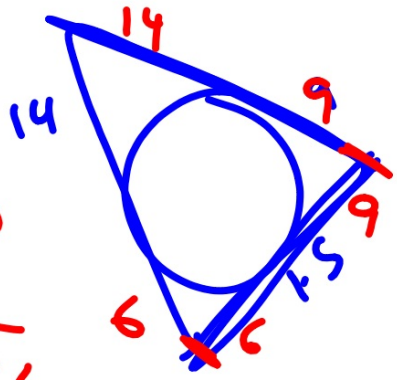


$44x + 4 = 180$

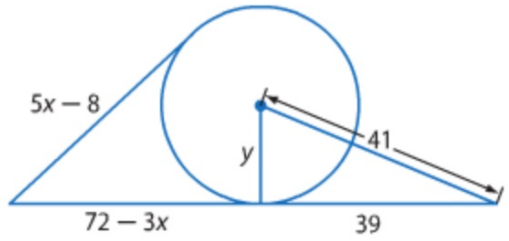
$-4 \quad -4$

$44x = 176$

$x = 4$



28. Find x and y. Assume that segments that appear to be tangent are tangent. Round to the nearest tenth if necessary.



$(x+4)^2+(y-3)^2=25$

$y=x+2$

$(1, 3)$

$(-4, -2)$

$(x+4)^2+(x-1)^2=25$

$x^2+8x+16+x^2-2x+1=25$

$2x^2+6x+17-25=0$

$\frac{2x^2}{2}+\frac{6x}{2}-\frac{8}{2}=\frac{0}{2}$

$x^2+3x-4=0$

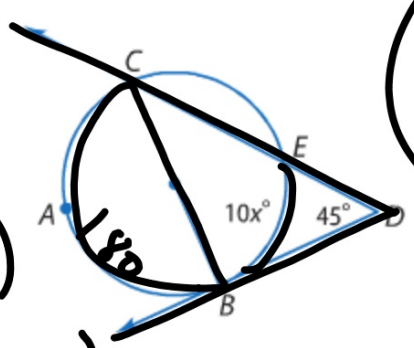
$-4 \cdot 1 = -4$, $-4+1=3$

$(x-1)(x+4)=0$

$x=1 \quad x=-4$

Example 6

Find the value of x.



angle $= \frac{1}{2}(? - ?)$

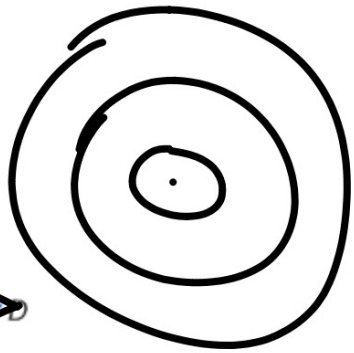
$45 = \frac{1}{2}(180 - 10x)$

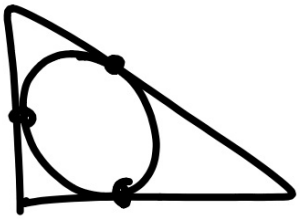
$45 = 90 - 5x$

$-90 \quad -90$

$-45 = -5x$

$x = 9$





33.