Solve the following System:

$-3x - 3y = 3$ $-3x - 3(-5x - 17) = 3$

$y = -5x - 17$ ↗ $-3x + 15x + 51 = 3$

$$\downarrow$$

$$12x + 51 = 3$$
$$ -51 \ -51$$

$y = -5(-4) - 17$ ↖ $12x = -48$

$y = 20 - 17$ $\overline{}$
                    12

$y = 3$ $x = 4$

$x = -4$
$y = 3$ $(-4, 3)$

Homework Check

1. $d = 5$ cm

2. $C = 10\pi$ cm

3. $r = \frac{12}{\pi}$ m

4. $C = 5.5\pi$ or $\frac{11\pi}{2}$ m

5. $C = 12\pi$ cm

6. $d = 46$ m

7. $C \approx 84.8$ in.

8. 565 ft

9. $C = 6\pi$ cm

10. 16 in

11. ≈ 4398 km/h

12. ≈ 11 m/s

15. 1399 tiles

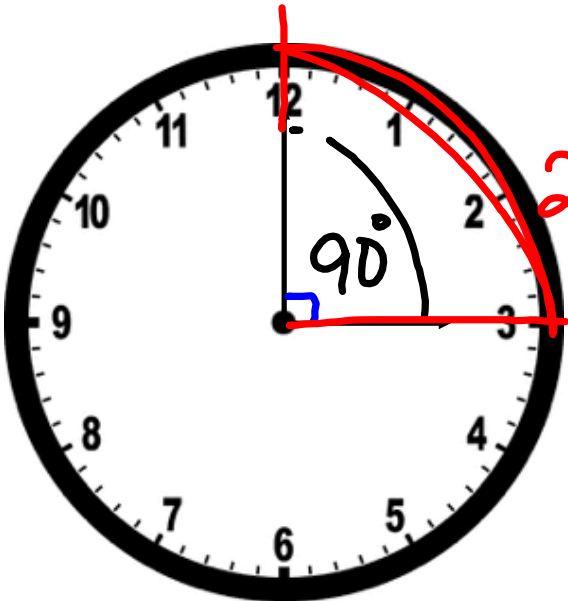**16.** $m\angle AEN = \frac{1}{2}(m\widehat{AN} = m\widehat{LG})$

$y = 142°$

$z = 110°$

$g = 40°$

$n = 30°$

$x = 70°$

one-half the sum of the measures of the two intercepted arcs.

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20 cm

90°

$C = 80$ cm

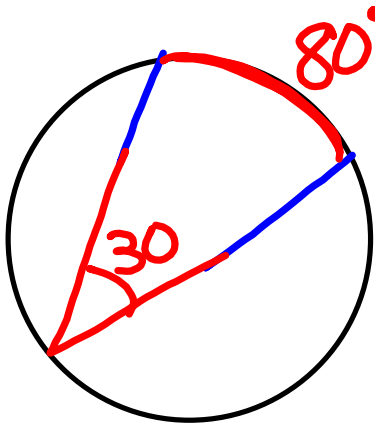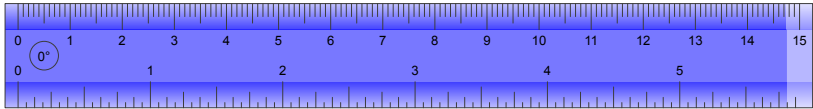• Arc measure - the measure of the arc, in degrees.

Arc length - the portion of the circumference of the circle described by an arc

Read Example A (page 481)

$$\frac{80}{360} \qquad \frac{2}{9}$$

$$\frac{60}{360} \qquad \frac{1}{6}$$

Investigation 9.6 page 482

Arc Length Conjecture: the length of an arc equals

the fraction of the circle(a/360) multiplied by the circumference.

$$Clock_{Ex} \quad \frac{1}{4}C$$

$$\frac{1}{4} \cdot 80 = 20cm$$

Read Example B and C on 482 - 482

Check with Mrs. Mayden, then you may start your homework

#1

$$\frac{80}{360} = \frac{2}{9} \cdot \frac{6\pi}{1}$$

$$\frac{12\pi}{9}$$

$$C = 2\pi r$$

$$\frac{4\pi}{3}$$

$$2\pi \cdot 3$$

$$6\pi$$

#2

$$\frac{120}{360}$$

$$1\frac{1}{3} \cdot \frac{\overset{8}{24}\pi}{1}$$

$$8\pi$$