4/12 Algebra 2 Monday 3-4-13 Class Notes

(57) A circle in the standard (x, y) coordinate plane intersects the x-axis at (−7, 0) and (1, 0). The radius is 5. Which could be the center?

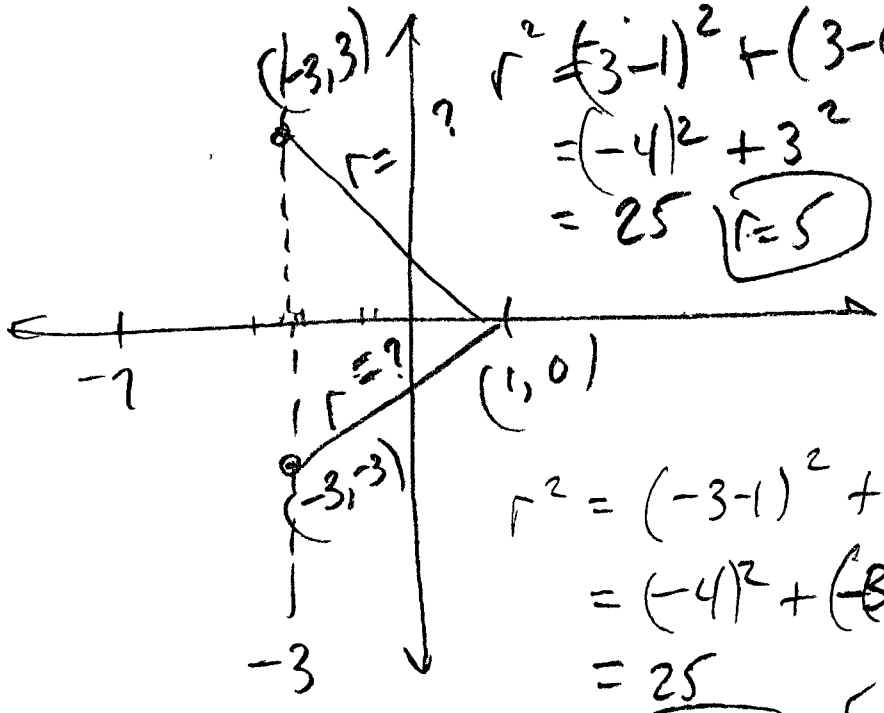
I. (−3, −3)

II. (−3, 0)

III. (−3, 3)

(A) I only (B) II only (C) III only

(D) I and III only (E) I, II and III



$r^2 = (3-1)^2 + (3-0)^2$

$= (-4)^2 + 3^2$

$= 25$

$r = 5$

$r^2 = (-3-1)^2 + (-3-0)^2$

$= (-4)^2 + (-3)^2$

$= 25$

$r = 5$

(53) Molly pushed wheelbarrow, In the distance it was pushed the wheel rotated $\frac{3\pi}{2}$ radians. The distance that Molly pushed it is what fraction of the circumference of the wheel.

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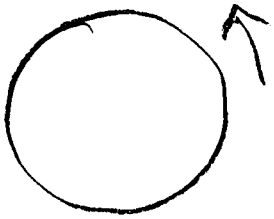
see next pg



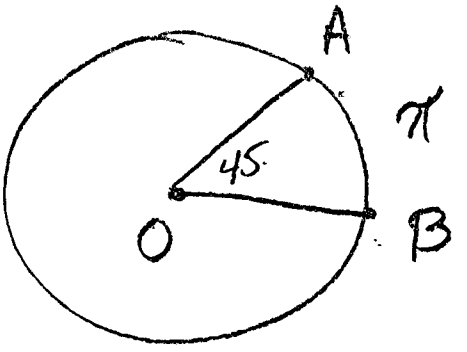
rotated $\frac{3\pi}{2}$ rad

$\therefore \frac{\frac{3\pi}{2}}{2\pi} = \frac{3\pi}{4\pi} = \frac{3}{4}$ PART OF 1 rot.

$C = 2\pi r \therefore \boxed{\left(\frac{3}{4}\right)} \cdot 2\pi r$

ANS

(50)



$\angle AOB = 45^\circ$

$\overset{\frown}{AB} = \pi$ cm

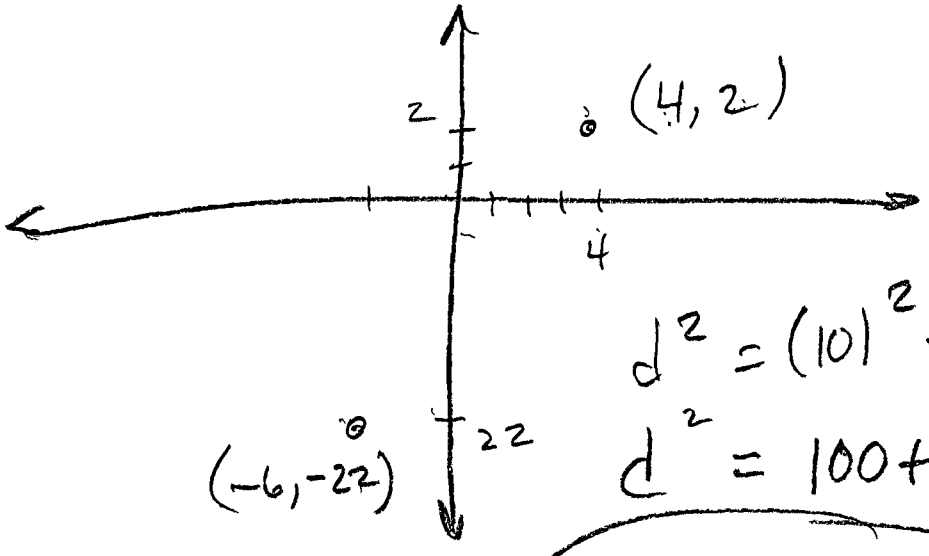
$r = ?$

$$\frac{45}{360} = \frac{1}{8} \quad \therefore \quad \frac{\pi}{2\pi r} = \frac{1}{8}$$

$$8\pi = 2\pi r$$

$$\boxed{4 = r}$$

(46) Emerg. helo 2 mi. North and 4 mi E. of city center. Emerg. 22 mi S. and 6 mi W. of CC. d (miles) between helo & Emerg.



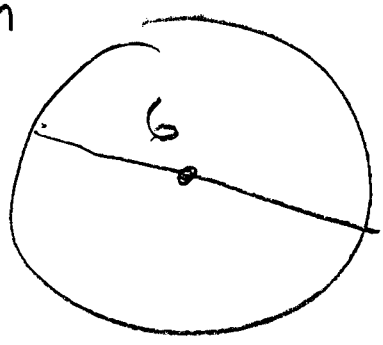
$d^2 = (10)^2 + (24)^2$

$d^2 = 100 + 576$

$d = 26$

(41) $dia = 6m$

$A = ?$



$r = 3$

$A = 9\pi cm^2$

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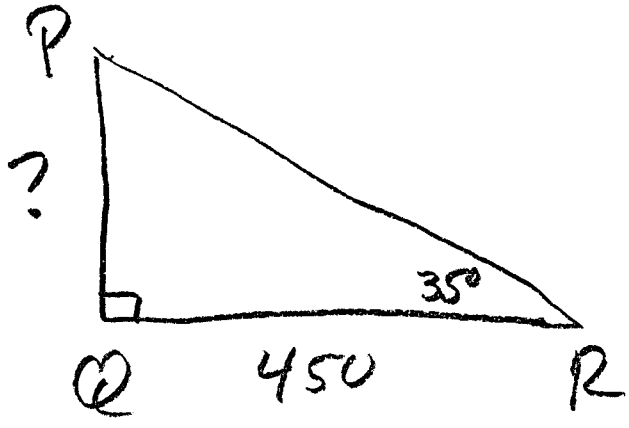
(37)



(A) $450 \sin 35°$

(B) $450 \tan 35°$

(C) $\frac{450}{\sin 35°}$

(D) $\frac{450}{\cos 35°}$

(E) $\frac{450}{\tan 35°}$