Larry
3-5-22

30)

$(x+4)^2$ ← +

$(x-h)^2 + (y-k)^2 = r^2$

-h (-) →
-k (-) ↑

$(x-3)^2 + (y-3)^2 = r^2$

$(x+3)^2 + (y+3)^2 = r^2$

41)

6   17
5   16
8   24

$y = x + 11$ is   OK

~~10   30~~
~~9   26~~

44)

$(0,3)$

2

1

$(\sqrt{3}, 0)$

$(0,0)$

$(0,-1)$

3

$(0,-3)$ endpoint
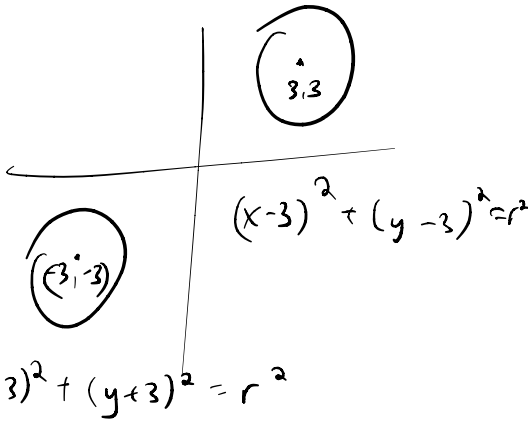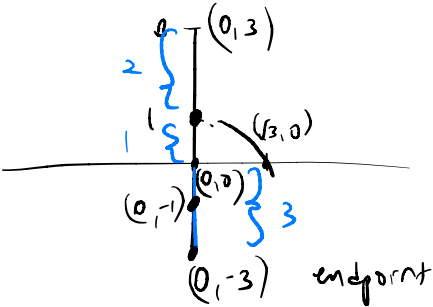
Draw this letter

$\tan\theta = \dfrac{opp}{adj} = \dfrac{y}{x}$

Negative when
    x (+) QIV
    y (-)

    x (-) QII
    y (+)

51)   C $\dfrac{3\pi}{4}$ $\dfrac{7\pi}{4}$

$\dfrac{\pi}{6} = 30°$

$\dfrac{\pi}{4} = 45°$

$\dfrac{\pi}{3} = 60°$
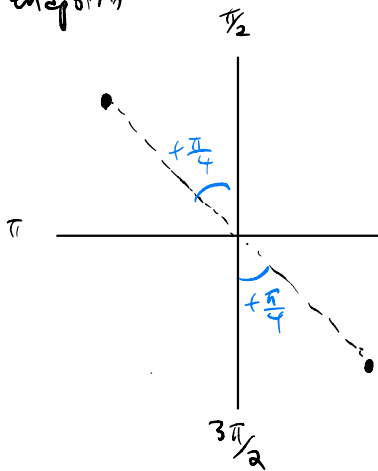
52) $V_{cylinder} = \pi r^2 h$

$V_{first} = 6\pi$

$V_{second} = 1.5^2 \pi h$
$\quad\quad = 2.25 \pi h$

$6\pi = 2.25 \pi h$

$6 = 2.25 h$

$h = \frac{6}{2.25} = F \quad 2\frac{2}{3} = \frac{8}{3}$

53)   We don't care too much about
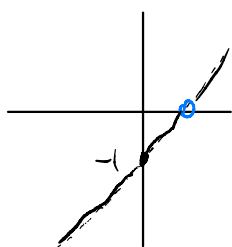$s = 4, 5, 6$

$s = 3$
$n = 4$ $\Rightarrow$ 9

C. $ns - s = 9$
      $s(n-1)$

60)

$y = \frac{(x-1)(x-1)}{(x-1)} = x-1$

Calculus
"math involving change"

$V_{cone} = \frac{\pi r^2 h}{3}$

"once you pour it in, the second glass is only half full"

$6 = 2.25 h$

$6 = 4.5 h$

$h = \frac{6}{6}$

If given diagram, use it
Read questions carefully

$x \neq 1$