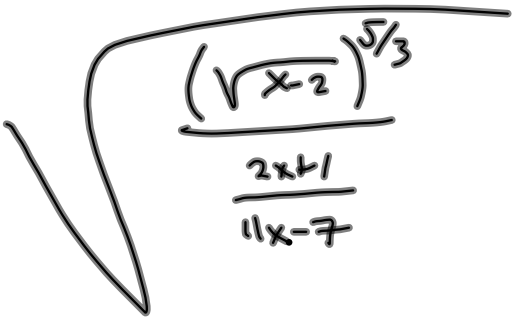



Unlined Paper !?

| | Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|---|---|---|---|
| 7:00 – 7:45 | Office | | Office | | Office |
| 7:45 – 9:00 | MAT 121 EDBH 133 | | MAT 121 EDBH 133 | | MAT 121 EDBH 133 |
| 9:00 – 10:15 | Office | Class Prep/ Office 8:00 – 12:00 | Class Prep/Office 9:00 | Class Prep/ Office 8:00 – 12:00 | Office |
| 10:15 - 12:00 | Flex | | | | Flex |
| 12:10 - 1:00 | MAT 201 EDBH 133 | MAT 201 EDBH 133 | MAT 201 EDBH 133 | MAT 201 EDBH 133 | MAT 201 EDBH 133 |
| 1:10 – 2:00 | | Class Prep/Office 1:00 – 3:00 | Class Prep/Office 1:00 – 3:00 | Class Prep/Office 1:00 – 3:00 | |
| 2:10 – 3:00 | | | | | |

Pretty much any time I'm not lecturing, you may drop in and I'll find time for you.

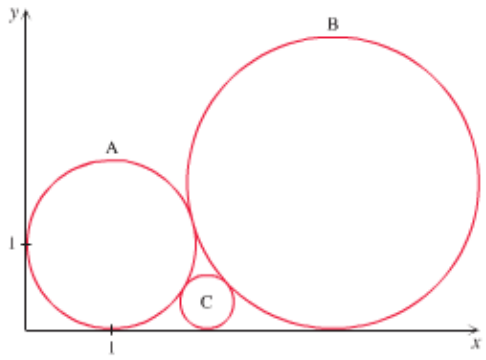
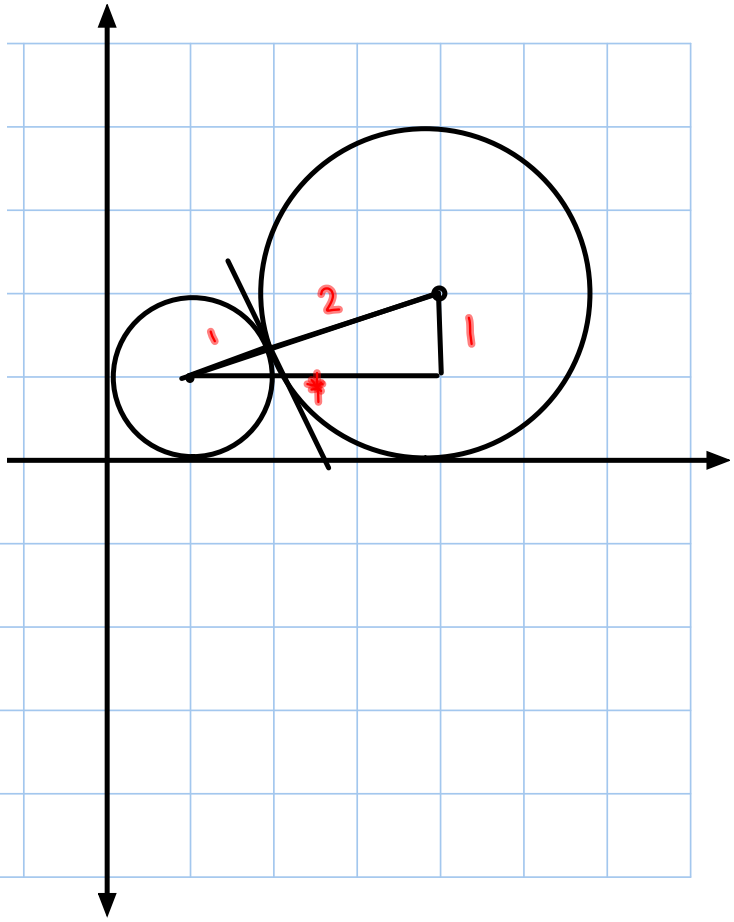



Figure for Exercise 111




Aug 21-7:54 AM

$$\frac{x-1}{x+3} = \frac{x+2}{x-6}$$

$$\left(\frac{x-1}{x+3}\right)\left(\frac{x-6}{x-6}\right) = \left(\frac{x+2}{x-6}\right)\left(\frac{x+3}{x+3}\right)$$

$$\frac{x^2-7x+6}{LCD} = \frac{x^2+5x+6}{LCD}$$

$$x^2-7x+6 = x^2+5x+6$$
$$-5x-6 = -5x-6$$

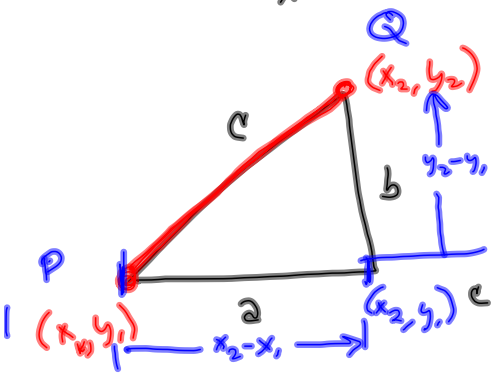
$$-12x = 0 \quad *$$
$$\frac{-12x}{-12} = \frac{0}{-12}$$
$$x = 0 \quad *$$

LCD = $(x+3)(x-6)$

$$\frac{x-1}{2} = \frac{x+2}{3}$$

LCD = $(2)(3)$

WRITE MUCH
THINK LITTLE.




$$a^2+b^2=c^2$$
$$|c| = \sqrt{a^2+b^2}$$
$$c = \pm\sqrt{a^2+b^2}$$

c is positive. ∴

$$c = \sqrt{a^2+b^2}$$

Distance from $(x_1, y_1)$ to $(x_2, y_2)$ is

$$\sqrt{(x_2-x_1)^2 + (y_2-y_1)^2} = D(P,Q)$$

P (3,7) & Q (2,1)
$(x_1, y_1)$ $(x_2, y_2)$

$$D(P,Q) = \sqrt{(2-3)^2 + (1-7)^2}$$
$$= \sqrt{(-1)^2 + (-6)^2}$$
$$= \sqrt{1+36} = \sqrt{37}$$

Midpoint:

$$\left(\frac{3+2}{2}, \frac{7+1}{2}\right)$$
$$= \left(\frac{5}{2}, \frac{8}{2}\right)$$
$$= \left(\frac{5}{2}, 4\right)$$

**28.** How many gallons of 20% alcohol solution must be mixed with 10 gal of a 50% alcohol solution to obtain a 30% alcohol solution?

Let $x$ = amt of 20% alcohol (in gallons)

Amt of Alc = Amt of Alc

$.2x + .5(10) = .3(x+10)$

$.2x + 5 = .3x + 3$

$-.3x \quad -5 = -.3x \quad -5$

$-.1x = -2$

$x = \frac{-2}{-.1} = 20$

22

#5 25,26

$\frac{}{3}$ $\frac{}{3}$

AND

$|3x+2| \leq 7$

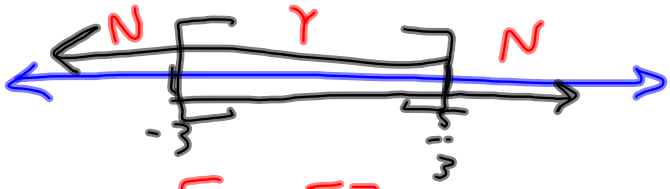
OR

$3|x+5|+1 \geq 2$

$3x+2 \leq 7$ AND $3x+2 \geq -7$

$3x \leq 5$ $3x \geq -9$

$\{x \mid x \leq \frac{5}{3}$ AND $x \geq -\frac{9}{3} = -3\}$




$= [-3, \frac{5}{3}]$

OR

$3|x+5|+1>2$

$3|x+5|>1$

$|x+5|>\frac{1}{3}$

$x+5>\frac{1}{3}$ OR $x+5<-\frac{1}{3}$

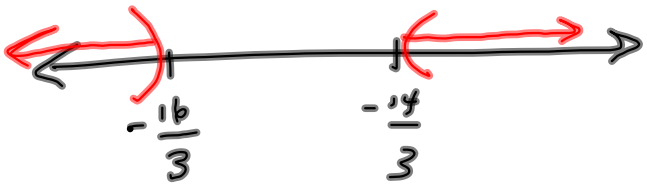
$x>-\frac{14}{3}$ OR $x<-\frac{16}{3}$

$|A|\leq B$ means

$A\leq B$ AND $A\geq -B$

$|A|\geq B$ means

$A\geq B$ OR $A\leq -B$



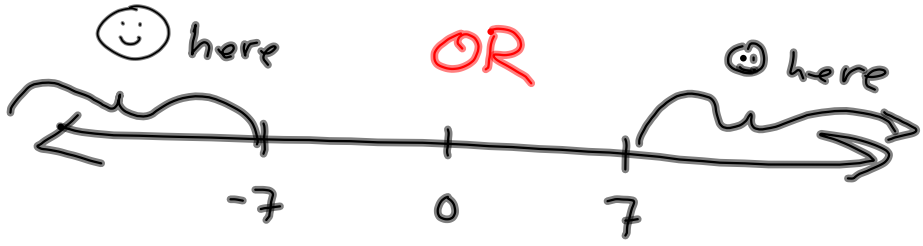

$-5+\frac{1}{3}=$ $-5-\frac{1}{3}=$

$-\frac{15+1}{3}=-\frac{14}{3}$ $\ldots=-\frac{16}{3}$

$x\in(-\infty,-\frac{16}{3})\cup(-\frac{14}{3},\infty)$

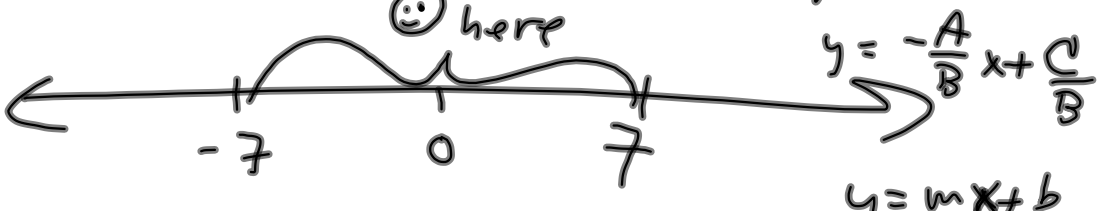
$|\ \ |>7$

here OR here




$|\ \ |<7$

here




$Ax+By=C$

$By=-Ax+C$

$y=-\frac{A}{B}x+\frac{C}{B}$

$y=mx+b$