Videos: Best Buy Sucks & they closed my old Radio Shack in that Safeway mall on 10th St & 35th

Homework: Get Rollin'!
work together / separately.
Come up here w/ questions.
We'll nail "formatting" as we go.

Hand in homework 1st 10 minutes.
No big if it waits 'til next class period.

Focus on §1.1, 1.2, 1.3, ...

CP is "prerequisite."

Some good review, but don't let it slow you down on CI.

I plan on making videos for CP, but headset, etc., is slowing me down.

Very easy to get bogged-down on that optional stuff.

Syllabus & Schedule got revised over the weekend. Check 'em out.

As we sit here, I'm putting a link to homework from the past, to give you an idea how I write the stuff.

~~See "old homework" link on the main NavBar.~~

Oh! It's the "examples" directory living with the homework assignments.

http://www.harryzaims.com/121-all/homework-assignments/,

i.e., here:

http://www.harryzaims.com/121-all/homework-assignments/examples/

S1.1 #23, from book (not MyLab)

LCD: (2)(3) = 6

$\frac{x}{2} - 5 = -12 - \frac{2x}{3}$

$\frac{x}{2}\cdot\frac{3}{3} - \frac{5}{1}\cdot\frac{6}{6} = -\frac{12}{1}\cdot\frac{6}{6} - \frac{2x}{3}\cdot\frac{2}{2}$

$\frac{3x}{6} - \frac{30}{6} = -\frac{72}{6} - \frac{4x}{6}$

$\frac{3x-30}{LCD} = \frac{-72-4x}{LCD}$

$3x-30 = -72-4x$

$+4x \quad +30 = \quad +30 \quad +4x$

$7x = -42$

$x = \frac{-42}{7} = -6 = x$

$\frac{2}{5} + \frac{1}{5} = \frac{2+1}{5} = \frac{3}{5}$

$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$

In the sequel, THIS might be the LCD:

$(x+3)(x+5)(x-7)$

$\frac{1}{18} + \frac{7}{30}$

2 | 18
3 | 9
3

2 | 30
3 | 15
5

$90 = LCD = 2\cdot3\cdot3\cdot5$

2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31

$\left(\frac{1}{2\cdot3\cdot3}\right)\left(\frac{5}{5}\right) + \left(\frac{7}{2\cdot3\cdot5}\right)\left(\frac{3}{3}\right)$ 1 2 3 5 7 9

$= \frac{5+21}{LCD} = \frac{26}{LCD} = \frac{\cancel{26}^{13}}{\cancel{90}_{45}} = \frac{13}{45}$

$\frac{3x+2}{(x+2)(x-1)} + \frac{7x-5}{(x+3)(x-1)}$ is coming, but the same technique applies!

$LCD = (x+2)(x-1)(x+3)$

So...

$\left(\frac{3x+2}{(x+2)(x-1)}\right)\left(\frac{x+3}{x+3}\right) + \left(\frac{(7x-5)}{(x+3)(x-1)}\right)\left(\frac{x+2}{x+2}\right)$

$= \frac{(3x+2)(x+3) + (7x-5)(x+2)}{LCD}$, etc., is the idea.

Averaged 80 mph on 1st half of trip.
Company wants 60 mph, avg.
what speed for 2nd half to make it come out 60 mph?

Dist = Rate · Time

$$\text{Avg Rate} = \frac{r_1 + r_2}{2}$$

Since $r_1 = 80$, we just need one variable, r:

$$\text{Avg Rate} = \frac{80 + r}{2}$$

Put words to "r"

r = the avg rate for 2nd half of his trip $\left(\frac{\text{mi}}{\text{hr}}\right)$ (i.e., mph)

Want Avg Rate = 60

$$\frac{r + 80}{2} = 60$$! Solve for r.

1 2 3 4 5 6 7 8 9 10

Ex. Score: 0 of 1 pt HW Score: 0% (0 of 23 pts)

Find the distance between the pair of points. Also, find the midpoint of the line segment joining them.

$\left(\frac{\pi}{6}, 4\right), \left(\frac{\pi}{4}, 0\right)$

Find the distance.

d = ☐

(Simplify your answer. Type an exact answer, using π as needed.)

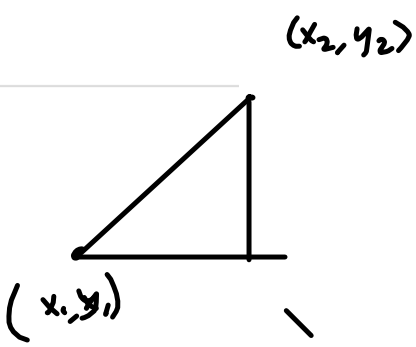
$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

$= \sqrt{\left(\frac{\pi}{4} - \frac{\pi}{6}\right)^2 + (0-4)^2}$

$= \sqrt{\left(\frac{\pi}{12}\right)^2 + (-4)^2}$

$= \frac{\pi^2}{12^2} + \frac{16}{1} \cdot \frac{12^2}{12^2}$

$= \sqrt{\frac{\pi^2}{144} + 16}$



$\frac{\pi}{4} \cdot \frac{3}{3} - \frac{\pi}{6} \cdot \frac{2}{2}$

$= \frac{3\pi - 2\pi}{12} = \frac{\pi}{12}$

She won! #39 S'1.2, Book.

Invested ~~Paid~~ 1/3 her winnings @ 14% coffee shop.

1/6 her .. @ 12%

1/2 to gummint

She earned $4,000

How much did she win?

Let x = how much she won (₦)

Then $\frac{1}{2}x$ to U.S.A.

$\frac{1}{3}x$ to coffee shop @ 14%

$\frac{1}{6}x$ .. bakery @ 12%.

Her earnings were ₦4,000

$\frac{1}{3}x$ ₦

$.14\left(\frac{1}{3}x\right)$ = earnings from coffee shop.

Total Earnings:

$$\left((.14)\left(\tfrac{1}{3}x\right) + (.12)\left(\tfrac{1}{6}x\right) = 4000\right)(100)$$

$$\frac{14}{3}x + \frac{12}{6}x = 400000$$

$$\frac{14x}{3} + \left(\frac{2x}{1}\right)\left(\frac{3}{3}\right) = \left(\frac{400000}{1}\right)\left(\frac{3}{3}\right)$$