Back of worksheet

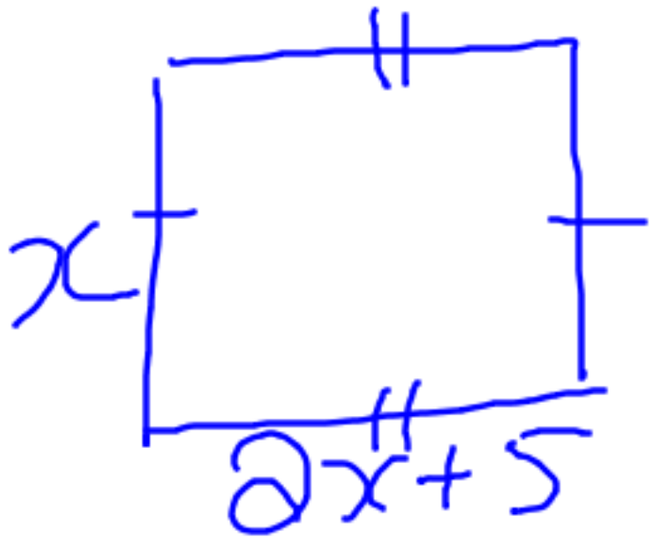
Peter has the same amount of money in dimes as Charlene has in quarters. She has 15 fewer coins.
Find: how much money does Peter have

Let x = the # of quarters Value: $0.25x$

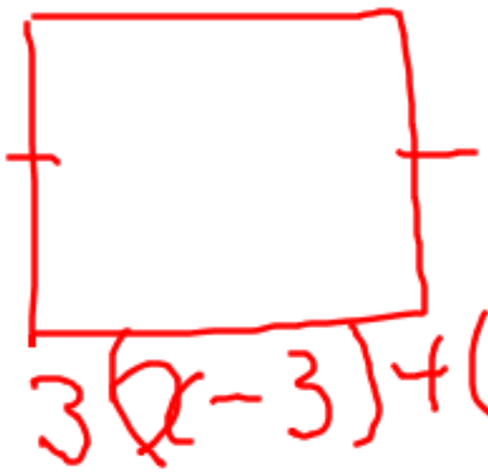
then let $x+15$ = the # of dims $0.10(x+15)$

$$0.25x = 0.10(x+15)$$

$$0.25x = 0.10x + 1.50$$



$P_1 = P_2$



Let x = the width

then let 2x+5 = the length

width is x-3

length 3(x-3)+6

Find: ~~dimensions~~

$2L+2w$

$2(2x+5)+2x =$

$= 2L+2w$

$= 2[3(x-3)+6]+2(x-3)$

p. 377 Uniform Motion Dec. 14

1. Calculate the distance travelled

1. 3h at 60km/h $D = S_{Speed} T_{ime(hours)}$ (Distance)

$D = ST$

$D = 60(3)$

$D = 180\text{km}$

3. $\frac{1}{2}$h at 90km/h

$D = 90(0.5)$

$D = 45\text{km}$

5 How long does each trip take?

40 km @ 80 km/h

$T = \frac{D}{S}$

$T = \frac{40}{80}$

$T = 0.5h$

7. 20km @ 100 km/h

$T = \frac{D}{S}$

$T = \frac{20}{100}$

$T = 0.2 \times 60$

$= 12 min$

9. Calculate each speed

300km in 3h

$$S = \frac{D}{T}$$

$$S = \frac{300\,km}{3h}$$

$$S = 100\,km/h$$

b. 40km in $\frac{1}{2}$ hr

$$S = \frac{D}{T}$$

$$S = \frac{40\,km}{\frac{1}{2}\,h}$$

$$S = 80\,km/h$$

	Distance	Speed (km/h)	Time (h)
17.	$90(x+1)$	90	$(x+1)$
19.	200	x	$\frac{200}{x}$

21. rt

23. D

r

$\frac{D}{t}$

t

24. Given: cruise ship left Halifax for Bermuda a 20km/h. Private boat left for Bermuda 1 h later at 25km/h

Find: how long did it take for private boat to catch up?

	D	S	T
cruise ship	$20x$	20km/h	x
private boat	$25(x-1)$	25km/h	$x-1$

Let x = cruise boat's time

then let $x-1$ = the private boat's time

$$20x = 25(x-1)$$
$$-25x \quad -25x$$
$$20x = 25x - 25$$
$$\frac{-5x}{-5} = \frac{-25}{-5}$$
$$x = 5$$

$\therefore$ it takes the private boat 4hours to catch up.

Homework

p. 377 #6 to 22

2 sided review sheet

Pathagorean theorem

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Sheet