Problems with the homework?

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Let x = original cost of the item in dollars

22. $x + 4.95 = 0.09x + x$

$\frac{4.95}{0.09} = \frac{0.09x}{0.09}$

$55 = x$

The cost is $55

verify LS	RS
4.95	0.09x
	0.09(55)
	4.95

LS = RS ∴ cost = $55

24. $4x + \frac{37}{5} = -17$ (×5)

$20x + 37 = -85$ (−37)

$\frac{20x}{20} = \frac{-122}{20}$

$x = -6.1$

LS	RS
$4x + \frac{37}{5}$	−17
$4(-6.1) + \frac{37}{5}$	
−24.4 + 7.4	
−17	

LS = RS ∴ x = −6.1

24. c) $\frac{3}{4} - 5p = \frac{67}{6}$ (×12)

$9 - 60p = 134$ (−9)

$\frac{-60p}{-60} = \frac{125}{-60}$

$p = -\frac{25}{12}$

LS	RS
$\frac{3}{4} - 5p$	$\frac{67}{6}$
$\frac{3}{4} - 5\left(-\frac{25}{12}\right)$	
$\frac{3}{4} + \frac{125}{12}$	
$\frac{9}{12} + \frac{125}{12}$	
$\frac{134}{12}$	
$\frac{67}{6}$	

LS = RS ∴ $p = -\frac{25}{12}$

Show all work

Solve and verify

February 14, 2018

1) $7 - 6x = 85$

3) $10x + 4 = -2x - 32$

2) $\frac{-6x}{4} + 7 = \frac{4}{5}$

4) $6(x-3) = 30$

Show all work

Solve and verify

1) $7 - 6x = 85$

$-7 \quad -7$

$\frac{-6x}{-6} = \frac{78}{-6}$

$x = -13$

LS	RS
$7-6x$	85
$7-6(13)$	
$7+78$	
85	

$LS = RS \therefore x = -13$

2) $\frac{-6x}{4} + 7 = \frac{4}{5}$ (20)

$-30x + 140 = 16$ $-140 \quad -140$

$\frac{-30x}{-30} = \frac{-124}{-30}$

$x = \frac{62}{15}$

LS	RS
$\frac{-6x}{4} + 7$	$\frac{4}{5}$
$\frac{-6(\frac{62}{15})}{4} + 7$	
$\frac{-2(\frac{62}{5})}{1} \times \frac{1}{4} + 7$	
$-\frac{124}{20} + \frac{140}{20}$	
$\frac{16}{20}$	
$\frac{4}{5}$	

$LS = RS \therefore x = \frac{62}{15}$

3) $10x + 4 = -2x - 32$

$+2x \quad +2x$

$\frac{12x}{12} = \frac{-36}{12}$

$x = -3$

LS	RS
$10x+4$	$-2x-32$
$10(-3)+4$	$-2(-3)-32$
$-30+4$	$6-32$
-26	-26

$LS = RS \therefore x = -3$

4) $6(x-3) = 30$

$6x - 18 = 30$ $+18 \quad +18$

$\frac{6x}{6} = \frac{48}{6}$

$x = 8$

LS	RS
$6(x-3)$	30
$6(8-3)$	
$6(5)$	
30	

$LS = RS \therefore x = 8$

February 15

Quiz

Name _____

practice

Solve and verify.

1. $2m + 8 = 11$

2. $5(x - 7) = -15$

Warm up

Solve for x and verify your solution.

a) $5 = \frac{2}{x}$, $x \neq 0$

$\frac{5x}{5} = \frac{2}{5}$

$x = \frac{2}{5}$

LS	RS
5	$\frac{2}{x}$
	$\frac{2}{0.4}$
	5

or $2 \div \frac{2}{5}$

$\frac{2}{1} \times \frac{5}{2}$

5

Try this

b) $\frac{2}{3}(6x + 5) = \frac{4}{5}(20x - 7)$

LCM = 15

$10(6x+5) = 12(20x-7)$

$60x + 50 = 240x - 84$

$-180x + 50 = -84$

$-180x = -134$

$\frac{-180x}{-180} = \frac{-134}{-180}$

$x = \frac{67}{90}$

LS	RS
$\frac{2}{3}(6x+5)$	$\frac{4}{5}(20x-7)$
$\frac{2}{3}(4(\frac{67}{90})+5)$	$(\frac{2}{20}(\frac{67}{90})-\frac{7}{1})$
$\frac{2}{3}(\frac{67}{15}+\frac{75}{15})$	$(\frac{134}{9}-\frac{63}{9})$
$\frac{2}{3}(\frac{142}{15})$	$\frac{4}{5}(\frac{71}{9})$
$\frac{284}{45}$	$\frac{284}{45}$

LS = RS ∴ $x = \frac{67}{90}$

method II

b) $\frac{2}{3}(6x + 5) = \frac{4}{5}(20x - 7)$

$\frac{(15)}{3}12x + \frac{(15)}{3}10 = \frac{(15)}{5}80x - \frac{(15)}{5}28$

Class/Homework

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8
#10(acf)
#11(a,c,e,f)
#12
#13
#15(a,b)
#17(abcd)
#19
#21 (a,d)
#22

8a $(s)\ 2.4 = \frac{4.8}{s}(s)$ $s \neq 0$

$\frac{2.4s}{2.4} = \frac{4.8}{2.4}$

$s = 2$