

1.) Jane's cell phone plan is \$40 a month plus \$.15 per minute for each minute over 200 minutes of call time. If Jane's cell phone bill is \$55.00, for how many extra calling minutes was she billed? Write and solve an equation to find out the number of extra calling minutes. Define your variables.

$$m = \text{min. over}$$

$$40 + .15m = 55$$

$$.15m = 15$$

$$m = 100 \text{ min.}$$

2.) $\frac{1}{6}(24x + 36) - 2x + 14 - 8 = 112$

$$4x + 6 - 2x + 14 - 8 = 112$$

$$2x + 12 = 112$$

$$2x = 100$$

$$x = 50$$

3.)

$$\frac{3}{11}x + \frac{5}{11}x - 7 + 26 = 14$$

$$\frac{8x}{11} + 19 = 14$$

11

$$\frac{8}{11}x = -5$$

~~11~~
~~8~~

$$x = \frac{-55}{8}$$

; -6.875

HW #11 Answers:

8.) 3

10.) $x + 1/2x = 1725$; $x = \$1150$

14.) -2

16.) 2

40.) 9

51.) The student forgot to multiply -1 by 8.

54.) 5

57.) 92 mi.



Geometry The perimeter of each rectangle is 64 in. Find the value of x .

8. $7m - 3m -$

54.

22 in.

$2x$

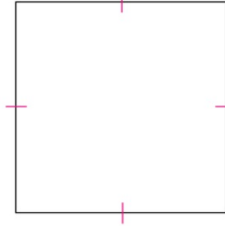


2x in.

$2x$

55.

$(3x + 2)$ in.



14. $15 = -3(2q$

16. $m + 5(m - 1$

40. $-(z + 5) =$

51. E

a

$\frac{3}{8}x - 1 :$

$3x - 1 :$

$3x :$

$x :$

$$4x + 44 = 64$$

$$4x = 20$$

$$x = 5$$

57. **Moving Costs** The MacNeills rented a moving truck for 3 days and 4 hours. Before returning the truck, they filled the tank with gas. The total cost was \$95.87. Find the number of hours the truck was driven.

1. The cost of renting a jet ski is \$40 per day plus \$50 per hour of use. How many hours was a jet ski rented if the total cost was \$390?

$$40 + 50h = 390$$

$$50h = 350$$

$$h = 7 \text{ hrs}$$



$$h = \text{hrs}$$

2. When an alligator is born it is about 8 inches long. Each year they grow about 12 inches. Determine how old an alligator is that is 116 inches long.



$$8 + 12y = 116$$

$$y = 9 \text{ y/o}$$

$$y = \text{years}$$

3. Membership at the Healthy You Gym is a \$40 initial fee and \$5 a visit. If Sanjaya's bill was \$105, how many times had he visited the gym?

$$40 + 5V = 105$$

$$5V = 65$$

$$V = 13 \text{ visits}$$

$$\text{visits} = V$$

4. Membership to a video game club is \$50 a year and \$3 per game rented. At the end of the year Harvey had spent \$296. How many games had he rented?

$$\begin{aligned}50 + 3g &= 296 & g &= \text{games} \\3g &= 246 \\g &= 82 \text{ games}\end{aligned}$$

5. Danielle wants to paint a ceramic planter. The total price is the cost of the planter plus an hourly painting rate of \$6. Determine how many hours Danielle painted if she spent \$9 on the planter and her total bill was \$33.

$$\begin{aligned}6h + 9 &= 33 \\6h &= 24 & h &= \text{hrs} \\h &= 4 \text{ hrs.}\end{aligned}$$

6. Jackson Intermediate School is doing a fund raiser selling magazine subscriptions. The magazine publisher will pay the school a starting bonus of \$500 and then \$4 for each magazine subscription sold. At the end of the fund raiser the school is paid a total of \$1360. How many subscriptions did they sell?

$$S = \text{subs.}$$

$$500 + 4S = 1360$$

$$4S = 860$$

$$S = 215 \text{ subs.}$$

7. The lengths of the sides of a triangle are x , $2x + 1$, $5x + 4$ inches. If the perimeter is 53 inches, what is the value of x ?

$$8x + 5 = 53$$

$$8x = 48$$

$$x = 6$$

$$1.) \quad \frac{1}{4}(6x + 24) - 2x + 10 - 4 = 43$$

$$\frac{3x}{2} + 6 - \frac{2x}{1} + 10 - 4 = 43$$

$$-\frac{1}{2}x + 12 = 43$$

$$-\frac{1}{2}x = 31$$

$$x = -62$$

$$\frac{3}{2} - \frac{2}{1} \cdot 2$$

$$\frac{3}{2} - \frac{4}{2} = -\frac{1}{2}$$

$$2.) \quad -\frac{1}{2}(6x - 4) + 5(x + 2) = 0$$

$$-3x + 2 + 5x + 10 = 0$$

$$2x + 12 = 0$$

$$2x = -12$$

$$x = -6$$

3.) $2[4 - (x - 1) + 3x] = 14$

$$2(4 - x + 1 + 3x) = 14$$

$$2(2x + 5) = 14$$

$$4x + 10 = 14$$

$$4x = 4$$

$$x = 1$$

4.) $2 + 3[2(x + 4) - 7] = 35$

$$2 + 3(2x + 8 - 7) = 35$$

$$2 + 3(2x + 1) = 35$$

$$2 + 6x + 3 = 35$$

$$6x + 5 = 35$$

$$6x = 30$$

$$x = 5$$

5.) $4[5x + 7 - 8x] + 2 = -18$

$$\begin{aligned}4(-3x + 7) + 2 &= -18 \\-12x + 28 + 2 &= -18 \\-12x + 30 &= -18 \\-12x &= -48 \\x &= 4\end{aligned}$$

You can now finish HW #12

Sect. 2-3

Pages 91 & 93

Problems #21-27 and #64

IXLs: J.5 & J.6 - due Friday!