Homework Solutions

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#2 e)
$$\frac{1}{2} \cdot \frac{1}{2} = \frac{1}{2} \cdot \frac{1}{3} \cdot \frac{1}{4}$$

C-14= 2c+3

-c-14= 3

-c=17

C=17

$$f) \quad 4.5 (1.2-m) = 2.4 (-2m + 2.1)$$

$$\underbrace{5.4 - 4.5m}_{0.3m} = -4.8m + 5.04$$

$$\underbrace{0.3m}_{m = -1.2} = -0.36$$

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11 a)
$$\chi \leq -5$$

b) $\chi < 1$

c) $\chi > 3.5$

d) $\chi \geq 1\frac{2}{3}$

B) ET 85 84 87

Practice with fractions
$$0 \times -10 = \frac{2}{3}$$

$$0 \times -9 = -8 + \frac{1}{8}$$

3)
$$2 - \frac{11}{3}\chi = -\frac{3}{4} + \frac{4}{3}\chi - \frac{8}{5} = \frac{7}{5}$$

WRITING EQUATIONS AND INEQUATIONS TO SOLVE PROBLEMS



HOW TO WRITE EQUATIONS TO SOLVE PROBLEMS:

- 1. THINK: What information is important?
- 2. PLAN AND DO: Identify the unknowns with a variable; make an equation and solve it.
- 3. LOOK BACK: Check your answer(s). Are all of the conditions of the problem satisfied?

Word Problems Using Percentage

For problems always change the percentage to a decimal:

28% =

65% =

8% =

0.5% =

11.5%=

6% =

1) 20% of a number is \$16.80. Write an equation to determine the number and solve. Verify.

2) Peter works in sales, his monthly salary is \$2000 and he receives 9% commission on sales. If he earned \$3800 in March, how much were his sales?

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Using two equations to help solve a problem.

These problems need you to create an two equations and compare them, using = or sometimes < and >.

"x" equals the number of minutes you use. A cell phone company offers two plans.

Plan A: 120 free minutes, \$0.75 per additional minute

Plan B: 30 free minutes, \$0.25 per additional minute

0.25(x-30)

Which time for calls will result in the same cost for both plans?

- a) Model the problem with an equation
- b) Solve the problem.
- c) Verify the problem





b)
$$0.75(x-120) = 0.25(x-30)$$

distribute through brackets

$$0.75x - 120(0.75) =$$

$$0.75x - 90 = 0.25x - 7.5$$

$$0.75x - 90 - 0.25x = 0.25x - 0.25x - 7.5$$

$$0.75x - 0.25x - 90 + 90 = 7.5 + 90$$

$$0.75x - 0.25x = -7.5 + 90$$

$$0.5x = 82.5$$

A business must choose a company to print brochures. Company A charges \$900 plus \$0.50 a copy Company B charges \$1500 plus \$0.38 a copy

- 1)Which company would I go with if I wanted very few copies?
- 2)How many brochures must be printed for both companies to be the same? (Make two equations first)
- 3)How many brochures would I need to make company B a better deal than company A?

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For shapes, you must know how to find perimeter, area and volume.

perimeter of a rectangle= area of a rectangle= volume of a rectangle=

The perimeter of a rectangle is 48 cm. The length is 4 cm less than three times the width. Find the length of each side.

more questions to come Wednesday