

NOV Pg 186-187; 17-33(0); 36-39(a)

17) 20

33) 20%

19) 30.8 ft

36) Lincoln: 59%

21) 10

Breckinridge: 24%

23) 84 ft

Bell: 13%

25) \$1000

Douglas: 4%

27) 200

37) 21%

29) 480%

38) 18%

31) 30%

39) 27%

2% of what is \$20.00

$$\frac{P}{W} = \text{---}$$

\$240 is what % of 50

$$\frac{P}{W} = \frac{\quad}{\quad}$$

Past Stuff... Def<sup>n</sup> in Abs. Val.  
Distance from Zero.

What are the four steps to solving an equation?  
Explain each step.

- ① Simplify → Dist. Prop. & Comb. Like Terms.
- ② Collect the Variables → Get the variables on one side
- ③ Inverse Opp. → get the variable by itself
- ④ Check → Plug it into the calc.

Use Inverse Operation and solve for the Variable.

$$\begin{array}{r} y - 15 = -4 \\ +15 \quad +15 \\ \hline y = 11 \\ \hline \hline \end{array}$$

$$7 + x = 3$$

$$\begin{array}{r} t + (+10) = 2 \\ -10 \quad -10 \\ \hline t = -8 \\ \hline \hline \end{array}$$

Use Inverse Operation and solve for the Variable.

$$\cancel{8} \cdot \frac{1}{\cancel{8}} m = -5 \cdot \cancel{8}$$

$$\underline{\underline{m = -40}}$$

$$\frac{81}{\cancel{3}} = \frac{3a}{\cancel{3}}$$

$$\underline{\underline{27 = a}}$$

$$4 \cdot \frac{x}{4} = -16 \cdot 4$$

# Multi-Step Equations:

$$\underline{9r} - 2 - \underline{6r} = 1$$

$$3r - 2 = 1$$

+2    +2

$$\hline 3r = 3$$

3        3

$$\underline{\underline{r = 1}}$$

$$-2(4 - x) - 7 = 5$$

$$-2(4) - 2(x) - 7 = 5$$

$$\underline{-8} + \underline{2x} - \underline{7} = 5$$

$$2x - 15 = 5$$

+15    +15

$$\hline 2x = 20$$

2        2

$$\underline{\underline{x = 10}}$$

$$\cancel{\frac{3}{4}} \left( \frac{3}{4}(y+8) \right) = 9$$

$$y + 8 = 12$$

-8    -8

$$\underline{\underline{y = 4}}$$

# Exact and Approx. Answers:

$$3x - 4 = 3$$

$$+4 \quad +4$$

$$\hline 3x = 7$$

exact

Ans  $\nearrow$

$$x = \frac{7}{3}$$

Approx.

Ans  $\nearrow$

$$x \approx 2.33$$

$$13.7t - 4.7 = 9.9 + 8.1t$$



# One Solution, No Solution, Identity:

$$36 - 4d = 4(9 - d)$$

$$36 - 4d = 4(9) - 4(d)$$

$$36 - 4d = 36 - 4d$$

$$+4d \quad +4d$$

$$36 = 36$$

Identity

$$12 + 11h = -18 - 4h$$

$$15x - 23 = 15x + 23$$

$$\begin{array}{r} -15x \quad -15x \\ \hline -23 = 23 \end{array}$$

False...  
No Solution

One tomato plant is 12 inches tall and grows 1 inch per week. Another tomato plant is 6 inches tall and grows 2 inches per week. Write and solve an equation to find when the plant will be the same height.

$$\text{Plant 1} = \text{Plant 2}$$

$$12 + 1w = 6 + 2w$$

$$\begin{array}{r} -1w \\ \hline \end{array}$$

$$12 = 6 + w$$

$$\begin{array}{r} -6 \\ \hline \end{array}$$

$$\underline{\underline{6 = w}}$$

# Formulas:

$$\frac{V}{wh} = \frac{lwh}{wh} \quad \text{solve for } l$$

$$\frac{V}{wh} = l$$

$$P = a + b + c \quad \text{solve for } b$$

$$P - a = b + c$$

$$P - a - c = b$$

Convert:

98 days to weeks.

$$\boxed{7 \text{ days}} = \boxed{1 \text{ wk}}$$

$$\begin{array}{|c|c|} \hline 98 \text{ days} & 1 \text{ wk} \\ \hline \end{array} = \underline{\underline{14 \text{ wks}}}$$

*(Note: The diagram shows a cancellation process where 98 days is divided by 7 days to get 14 weeks. The 7 days is written below the 98 days, and the 1 wk is written above the 7 days. The result 14 wks is underlined.)*

39 hours to minutes.

$$\begin{array}{|c|c|} \hline & \\ \hline \end{array} =$$

At 60 miles per hour, a car travels 340 miles on 20 gallons of gasoline.

What is the average <sup>Unit Rate</sup> mileage per gallons of gasoline?

$$\text{Unit Rate} \frac{\text{mileage}}{\text{gal}} = \frac{340}{20} = \underline{\underline{17 \text{ mi/gal}}}$$

How many miles could this car travel on 5 gallons of gasoline at the same speed?

$$\frac{17 \text{ m}}{1 \text{ gal}} \cdot 5 \text{ gal} = \underline{\underline{85 \text{ miles}}}$$

What percent of the 20 gallons is 5 gallons?

$$\frac{P}{W} = \frac{x}{100} = \frac{5}{20}$$

$$x \cdot 20 = 100 \cdot 5$$

$$\underline{\underline{x = 25\%}}$$

O.T.L.

pg 180-181; 1-3; 5-11; 13-19(0); 20, 21, 23-27(0); 28

Tomorrow.