

Section/Lesson Title: WORD PROBLEMS

Materials: WS

HW# 2.4 WS

Reflections:

I SOLVING WORD PROBLEMS ALGEBRAICALLY

1. ASSIGN VARIABLES
2. WRITE EQUATION
3. SOLVE: CHECK ANSWER TO SEE IF IT'S REASONABLE
(MAKE SURE YOU ANSWER THE ACTUAL QUESTION)

① ALI HAD A GARAGE SALE. SHE SOLD EVERYTHING FOR A NICKEL OR A DIME. SHE SOLD 12 ITEMS & MADE \$.95. HOW MANY NICKELS & DIMES?

$$\begin{aligned} d &= \# \text{ dimes} \\ n &= \# \text{ nickels} \end{aligned}$$

$$d + n = 12 \rightarrow d = 12 - n$$

$$10d + 5n = 95 \quad \leftarrow$$

$$10(12 - n) + 5n = 95$$

$$\left\{ \begin{array}{l} \\ \\ \\ \end{array} \right. \\ n = 5$$

She had 7 dimes & 5 nickels

② THE PERIMETER OF A \triangle IS 71cm. THE 1ST SIDE IS 3cm SHORTER THAN THE 2ND SIDE AND THE 3RD SIDE IS TWICE AS LONG AS THE 1ST SIDE. FIND EACH SIDE LENGTH.

$$x = \text{LENGTH OF 2ND SIDE}$$

$$x - 3 = \text{LENGTH OF 1ST SIDE}$$

$$2(x - 3) = \text{ " " 3RD " "}$$

$$x + x - 3 + 2(x - 3) = 71$$

$$\left\{ \begin{array}{l} \\ \\ \\ \end{array} \right. \\ x = 20$$

20cm, 17cm, 34cm