

: pg 33-34 : 1-39(0); #2

① subtraction

② $7-n$

③ B ⑤ A

⑦ $x+10=24$

⑨ $\frac{20}{n} \leq 2$

⑪ $10-x$

⑬ $x+9$

⑮ $\frac{x}{50}$

⑰ $x+18$

⑲ $x-7$

⑳ D ㉑ C

㉓ $x+10 \geq 44$ ㉔ $35 < 21-x$

㉖ $7x=56$ ㉘ $\frac{35}{x}=7$

㉚ $28-x=18; 10$ ㉜ $\frac{49}{x}=7; 7$

㉞ $110=55+; 2h$

㉟ $\$50$

1.6. Problem Solving Plan Using Models

Sept. 26, 2006

-modeling: writing algebraic expressions, equations, inequalities that represent "Real-Life Math"

-Verbal Model: Words Only

-algebraic Model: translation of the Verbal Model into Math (#'s & Variables)

ex1]

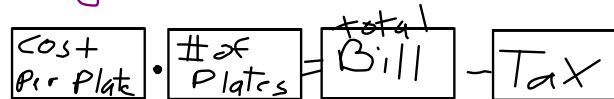
* Chinese Restaurant.

* Order Several $\$2.00$ Plates

* The Bill is $\$25.50$ which includes a $\$1.50$ in tax.

→ Make a Model to find the Number of Plates

Stage 1: Verbal Model:



Stage 2: Create Labels

Cost Per Plate → $\$2.00$

of Plates → x plates

Tax → $\$1.50$

Total Bill → $\$25.50$

Stage 3: algebraic Model:

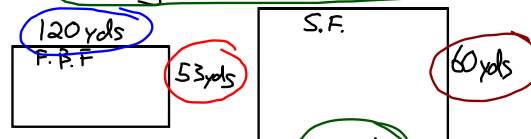
$$2 \cdot x = 25.50 - 1.50$$

$$\frac{2x}{2} = \frac{24}{2}$$

$$\underline{\underline{x = 12 \text{ plates}}}$$

ex2) * a football field is 53 yds wide
and 120 yds long
* a Soccer field has the same
Area, but is 60 yds wide.

? How Long is the Soccer field.



Stage 1: Verbal Model
Area of F.B.F. = Area of S.F.

$$\begin{array}{|c|c|} \hline \text{length of} \\ \hline \text{the F.B.F.} \\ \hline \end{array} \cdot \begin{array}{|c|c|} \hline \text{width of} \\ \hline \text{the F.B.F.} \\ \hline \end{array} = \begin{array}{|c|c|} \hline \text{length of} \\ \hline \text{the S.F.} \\ \hline \end{array} \cdot \begin{array}{|c|c|} \hline \text{width of} \\ \hline \text{the S.F.} \\ \hline \end{array}$$

Stage 2: Create Labels

Length of the F.B.F. → 120 yds
Width of the F.B.F. → 53 yds
Length of the S.F. → x yds
Width of the S.F. → 60 yds

Stage 3: Alg. Model

$$120 \cdot 53 = x \cdot 60 \text{ yds}$$

$$\begin{array}{r} 6360 = 60x \\ \hline 60 \quad 60 \end{array}$$

$$\begin{array}{r} 106 \text{ yds} = x \\ \hline \hline \end{array}$$

O.T.L.

- ① Write the Blue Box
ontop of Pg 37 into
Your Notebooks.
- ② Pg 37: "at the Bottom"
Checkpoint #1. Include a
Picture
- ③ Pg 39: 1-10 (all)
- ④ Need Graph Paper
for ~~next week~~
Tomorrow