

## 3.5. Solving Problems

Dec. 18, 2006

\*Goal! To Solve Problems  
Using Equations.

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ex 1) David bought a radio on Sale + Saved \$8.00.

The radio's regular Price is \$35.00.  
What was the Sale Price?

\$27.00 is the Ans!  
( $35 - 8 = 27$ )

Now with equations.

Saved + Paid = Total (original)

\*  $8 + P = 35$

Let  $P$  represent "Paid"

$$\begin{array}{r} 8 + P = 35 \\ -8 \quad -8 \\ \hline P = 27 \end{array}$$



ex2) Lisa weighs 128 pounds.  
This is 8 times the weight  
of her saddle.

What does her saddle weigh?

\* Let:  $n$  = saddle weight  
(let the variable = the question)

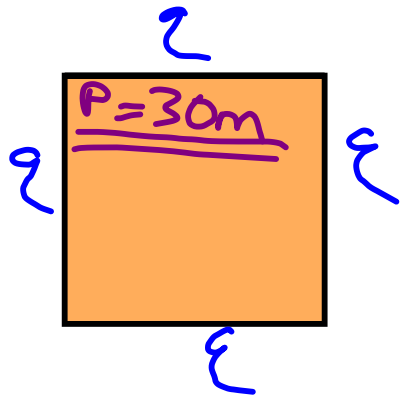
$$\frac{128}{8} = \frac{8 \cdot n}{8}$$

$$\underline{\underline{16}} = n$$

ex 3) The perimeter of a square is 30m.

Find the length of each side.

Let  $a$  = length of a side



$$P = a + a + a + a$$
$$\frac{30}{4} = \frac{4a}{4}$$

$$\frac{15m}{2} = a$$

O.T.L.

① Pg 88: Exp. 1-12 (all)

~~Due Today!~~

- define the Variable  
ie: Let:          =           
Variable of your choice
- State the equation  
and
- Solve for the Variable