

18. a) Translate into mathematical symbols:
 "A number divided by four is seven."
 Let y represent the number.

$$y \div 4 = 7$$

- b) Use mental math to solve the equation.

$$28 \div 4 = 7$$

- c) Check your solution.

$$y \div 4 = 7$$

$$\begin{array}{r} \times 4 \\ \times 4 \end{array}$$

$$y = 28$$

19. Ms. Parsons earns \$200 each week plus \$25 for each pair of shoes that she sells. How many pairs of shoes does she need to sell to earn \$1000 per week?

Let p be the pairs of shoes she needs to sell.

$$25p + 200 = 1000$$

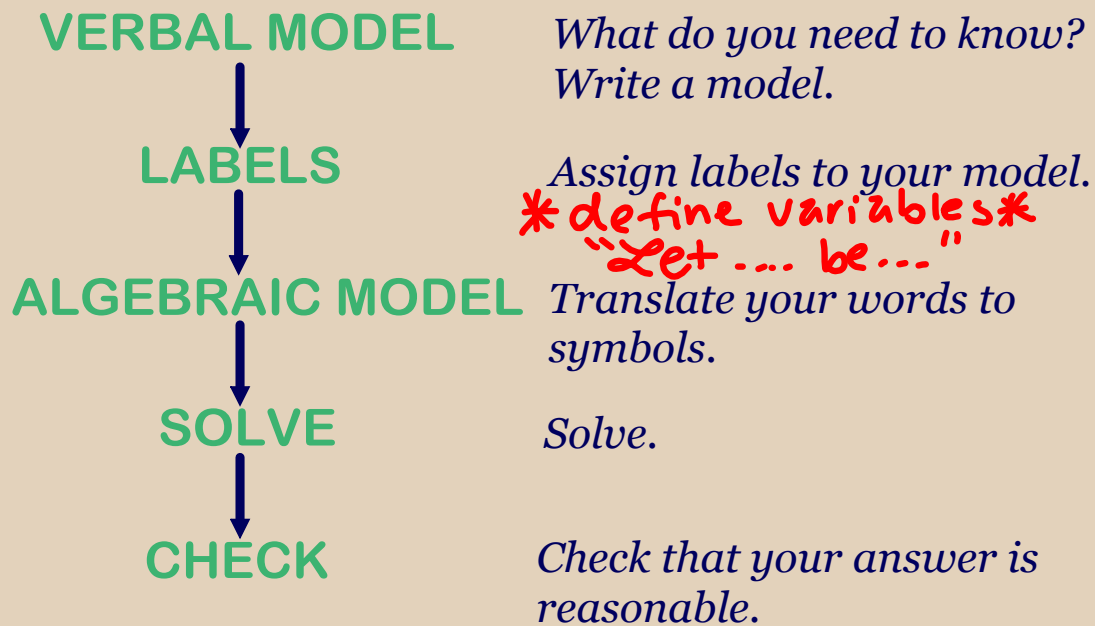
$$\begin{array}{r} - 200 \\ - 200 \end{array}$$

$$25p = 800$$

$$\begin{array}{r} \underline{25} \\ \underline{25} \end{array}$$

$$p = 32$$

PROBLEM SOLVING PLAN USING MODELS



20. Jasmine bought 6 DVDs all at the same price. The tax on her purchase was \$5.04 and the total was \$85.74. What was the price of each DVD?

② Let a be the price of each DVD.

$$\textcircled{3} \quad 6a + 5.04 = 85.74$$

$$\quad \quad -5.04 \quad \quad -5.04$$

$$\begin{array}{r} 13.45 \\ 6 \overline{) 80.70} \\ \underline{6} \\ 20 \\ \underline{18} \\ 27 \\ \underline{24} \\ 30 \\ \underline{30} \\ 0 \end{array}$$

$$\frac{6a}{6} = \frac{80.70}{6}$$

$$a = 13.45 \quad \textcircled{4}$$