

Word problems

Classwork:

A dog weighs 2 pounds more than a cat. Together, a dog and a cat weigh 12 pounds. How many pounds does the dog weigh? How many pounds does the cat weigh?

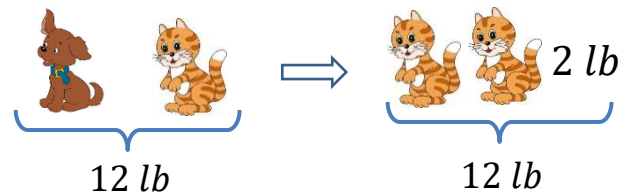
Problem.

What do we know?

$$\begin{aligned} \text{Dog} &= \text{Cat} + 2 \\ \text{Cat} + \text{Dog} &= 12 \text{ lb} \end{aligned}$$

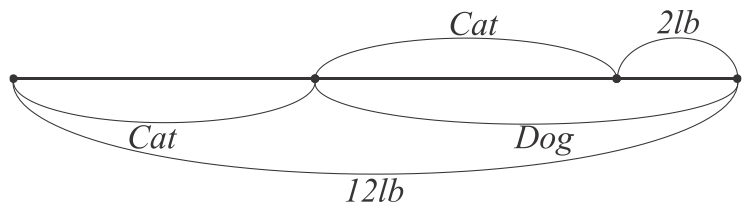
What is the question?

$$\begin{aligned} \text{Cat} &=? \text{ lb} \\ \text{Dog} &=? \text{ lb} \end{aligned}$$





$$\Rightarrow 12 - 2 \text{ lb}$$



$$\text{Cat} + \text{Dog} = 12 \quad \text{and} \quad \text{Dog} = \text{Cat} + 2$$

$$\text{Cat} + (\text{Cat} + 2) = 12$$

$$\text{Cat} + \text{Cat} + 2 = 10 + 2$$

$$\text{Cat} + \text{Cat} = 10$$

$$\text{Cat} = 5 \text{ lb}$$

$$\text{Dog} = \text{Cat} + 2 = 7 \text{ lb}$$

Homework:

1. Mary and Julia are twins. They invited 28 friends to their birthday party. Mary wrote 3 times as many invitation cards as Julia did. How many cards did Julia write?



2. A cow weighs 20 times as much as sheep weights. Together the cow and the sheep weight 2100 lb. How many pounds does the sheep weight? How many pounds does the cow weight?



3. Solve:

- a. $(418 : 418 - 0 \cdot 75) \cdot (62 - 62) + (89 \cdot 1) : 89 =$
- b. $65 \times 3 =$
- c. $44 \times 7 =$
- d. $575 - 289 =$
- e. $5,467 + 284 =$

4. Find missing digits:

$$\begin{array}{r} \square 9 5 \\ + 3 \square 4 \\ \hline 8 4 \square \end{array}$$

$$\begin{array}{r} \square 2 0 \\ - 4 \square 7 \\ \hline 3 6 \square \end{array}$$