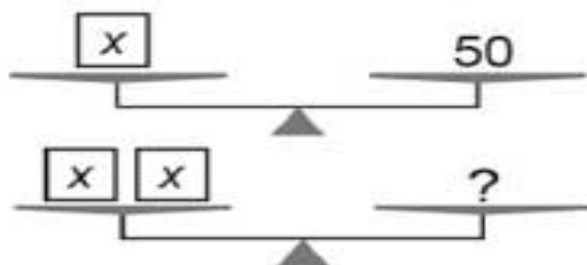


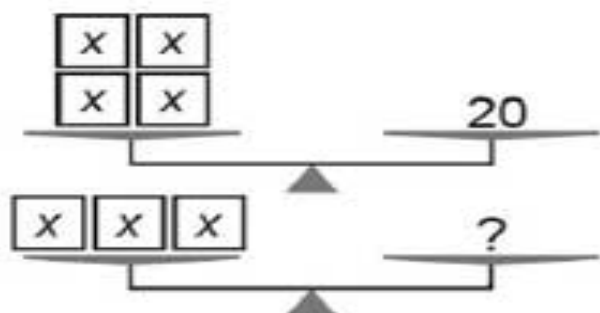
Write the answers in the box, then fill in the blanks in the proof.

**Problem 1**

$$x = \underline{\hspace{2cm}}$$

$$? = \underline{\hspace{2cm}}$$

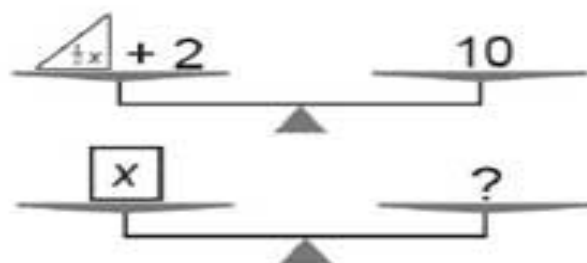
From the 1st scale we know:  $x = 50$ .  
Substitute  $\underline{\hspace{1cm}}$  for  $x$  in:  $2x = ?$  (2nd scale).  
So  $2(\underline{\hspace{1cm}}) = 100 = ?$

**Problem 2**

$$x = \underline{\hspace{2cm}}$$

$$? = \underline{\hspace{2cm}}$$

From the 1st scale we know:  $4x = 20$ .  
Divide both sides of this equation by 4  
so  $x = \underline{\hspace{1cm}}$ . Substitute  $\underline{\hspace{1cm}}$  for  $x$  in:  
 $3x = ?$  (2nd scale). So  $\underline{\hspace{1cm}}(3) = 15 = ?$

**Problem 3**

$$\frac{1}{2}x = \underline{\hspace{2cm}}$$

$$? = \underline{\hspace{2cm}}$$

From the 1st scale we know:  $\frac{1}{2}x + 2 = 10$ .  
Subtract  $\underline{\hspace{1cm}}$  from both sides of this  
equation so  $\frac{1}{2}x = \underline{\hspace{1cm}}$ . Substitute  $\underline{\hspace{1cm}}$  for  
each  $\frac{1}{2}x$  in:  $x = ?$  (2nd scale).  
(Note:  $1x$  is the same as  $x$ .)  
So  $\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}} = ?$