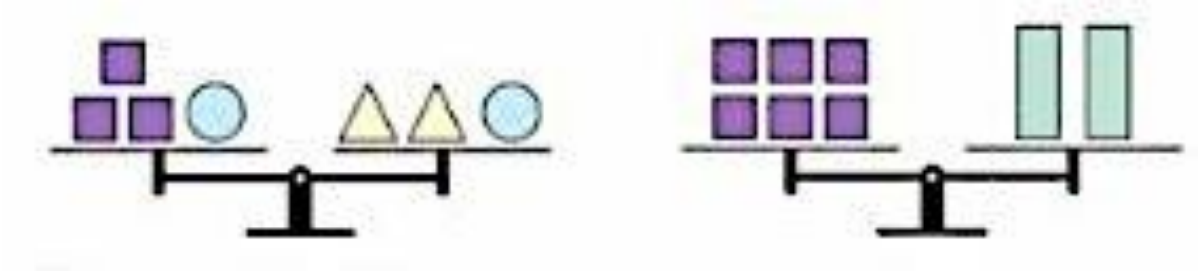
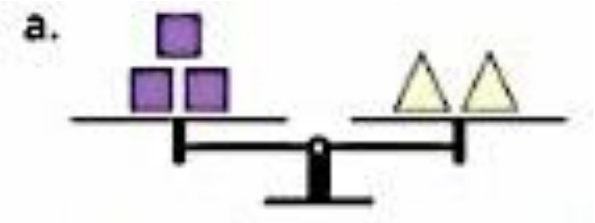
Do Now

Please work with your teammates on this Do Now. Thank you!

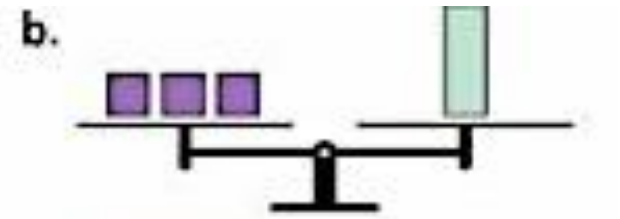


You can use a balance scale model to solve equations. The scales above are balanced. Use them to determine whether each of the scales below is balanced.

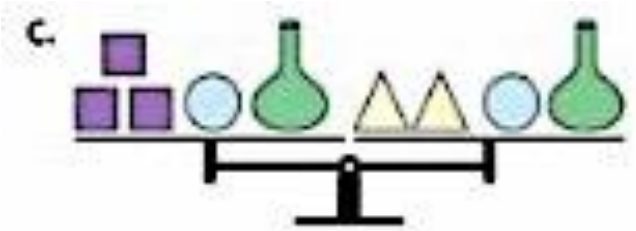
a.



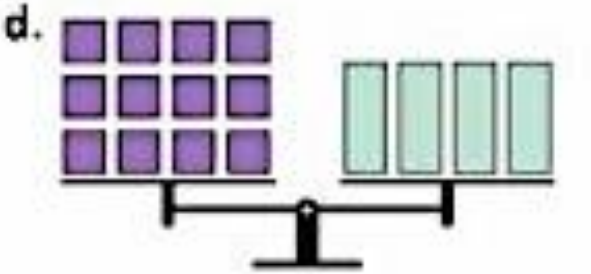
b.

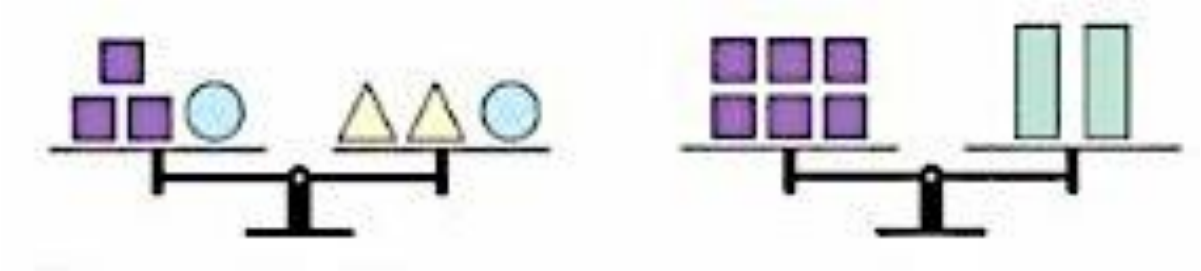


c.



d.





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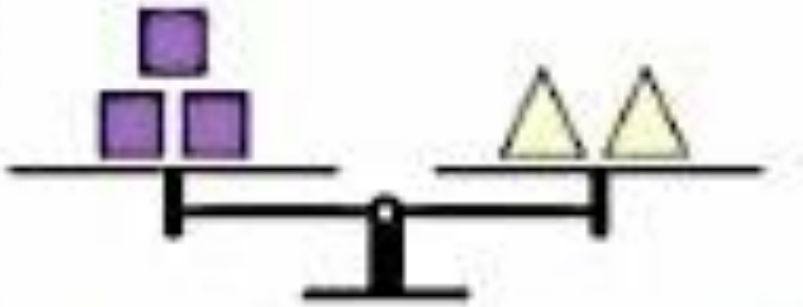

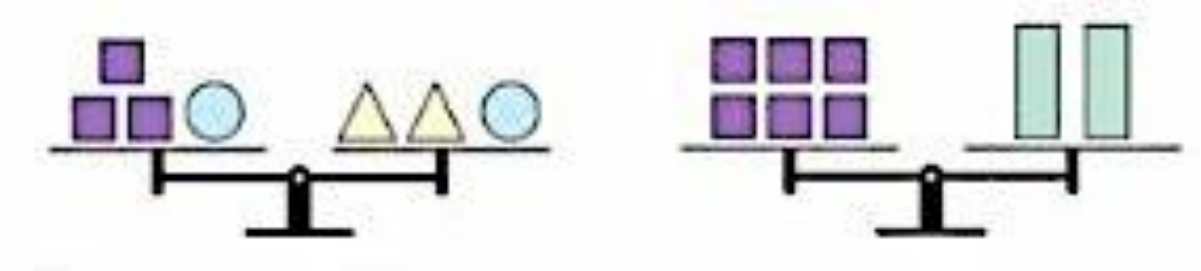

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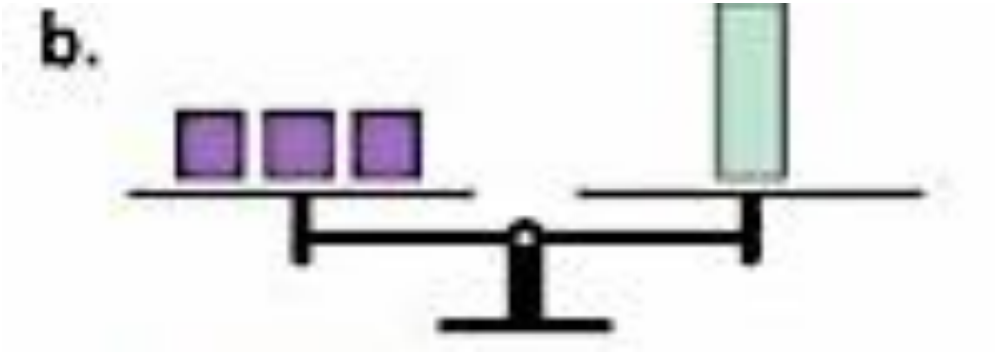

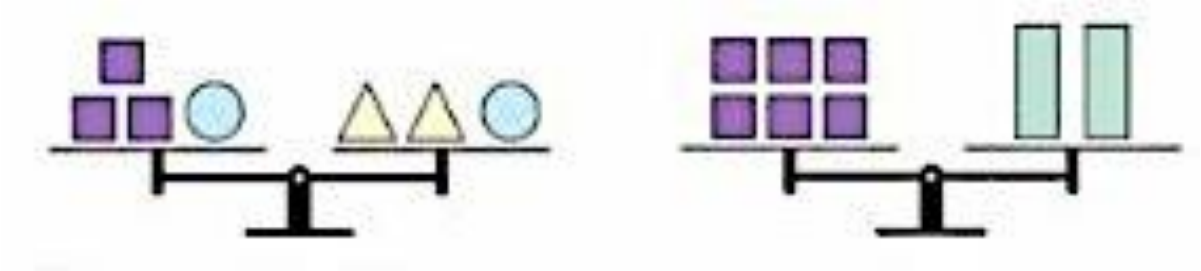

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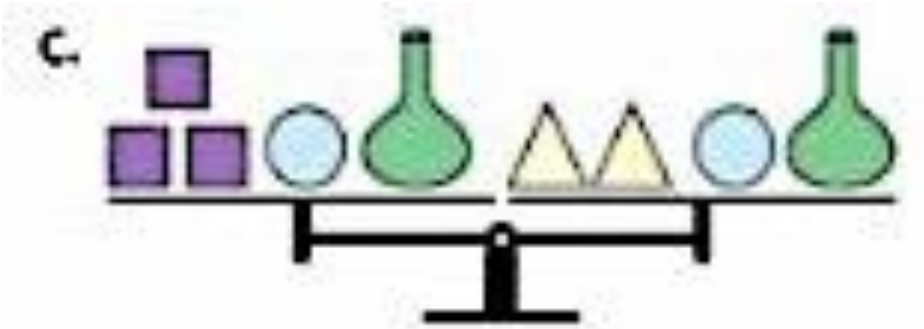

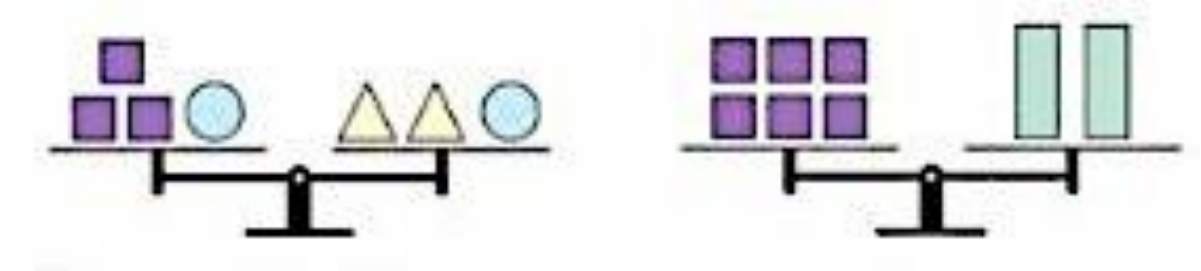

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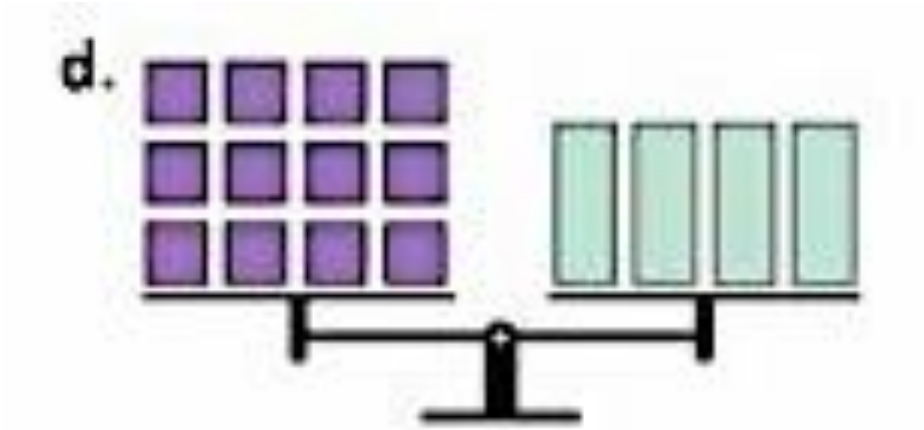

Variables like to hide. As a mathematician, it is your job to identify them.

NOTES

Reciprocals: Two numbers whose _____ is ____.

Examples:

Property of Equality: If $a = b$, then $a + c = b + c$, and $ac = bc$.
Example: If $x = 5$, then $x + 2 = 5 + 2$, and $2x = 2(5)$.

Definition of Subtraction: Subtracting is the same as

_____ the _____.

Definition of Division: Dividing is the same as

_____ by _____.

Deconstructing an equation to identify the variable value:

$$x + 8 = 17$$

Verify: $x+8=17$

Deconstructing an equation to identify the variable value:

$$7p = 21$$

Verify: $7p = 21$

Deconstructing an equation to identify the variable value:

$$\frac{z}{3} = 18$$

Verify: $\frac{z}{3} = 18$

Deconstructing an equation to identify the variable value:

$$g + (-7) = -11$$

Verify: $g + (-7) = -11$

Deconstructing an equation to identify the variable value:

$$\frac{w}{5} = -\frac{7}{15}$$

Verify: $\frac{w}{5} = -\frac{7}{15}$