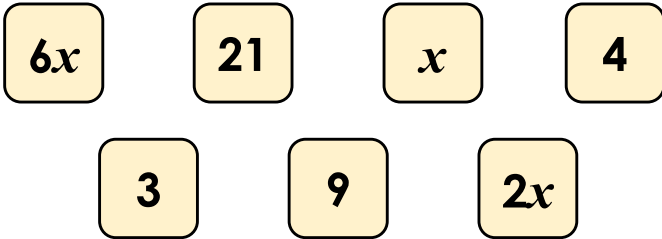


Two-Step Equations

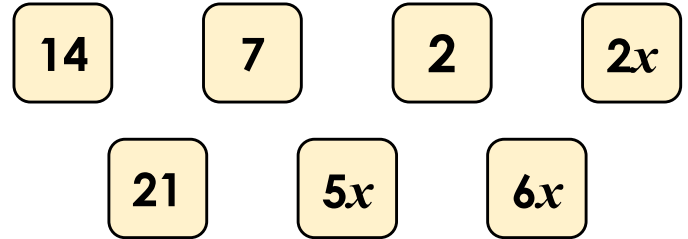
1a. Use the cards below to create three balanced equations where $x = 6$. You must use a different operation in each equation.



PS

Two-Step Equations

1b. Use the cards below to create three balanced equations where $x = 7$. You must use a different operation in each equation.



PS

2a. Choose a value for y and find three possibilities to complete the following equation.

$$2y - \square = \square$$

7		
y	y	$- ?$



PS

2b. Choose a value for y and find three possibilities to complete the following equation.

$$4y + \square = \square$$

27				
y	y	y	y	$+ ?$



PS

3a. Scott and Mia are solving the following algebraic equation.

$$2x + 6 = 19 + 5$$



Scott

x must be 6 for this equation to be balanced.

x must be 9 for this equation to be balanced.



Mia

Who is correct? Prove it.



R

3b. Ben and Freya are solving the following algebraic equation.

$$3x + 3 = 16 + 8$$



Ben

x must be 7 for this equation to be balanced.

x must be 5 for this equation to be balanced.



Freya

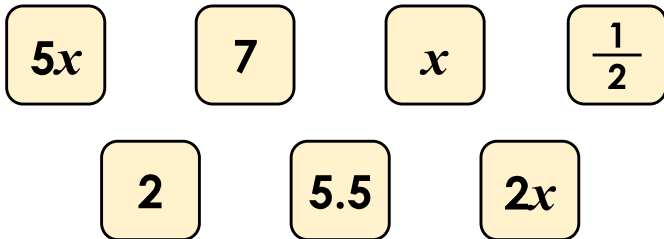
Who is correct? Prove it.



R

Two-Step Equations

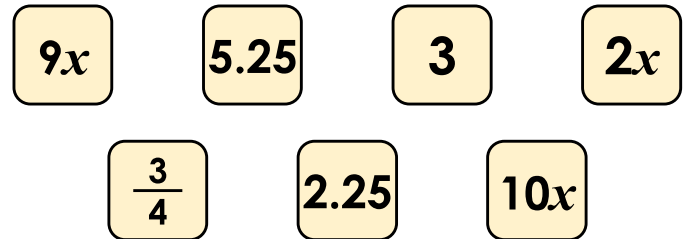
4a. Use the cards below to create three balanced equations where $x = 2.5$. You must use a different operation in each equation.



PS

Two-Step Equations

4b. Use the cards below to create three balanced equations where $x = 0.75$. You must use a different operation in each equation.



PS

5a. Choose a value for y and find three possibilities to complete the following equation.

$$\boxed{}y + \boxed{} = 6$$

6		
y	y	$+ ?$



PS

5b. Choose a value for y and find three possibilities to complete the following equation.

$$\boxed{}y - \boxed{} = 12$$

12			
y	y	y	$- ?$



PS

6a. James and Lily are solving the following algebraic equation.

$$0.5x - 9 = 5$$



James

This equation is impossible because 9 is smaller than 0.5.

x must be 28 for this equation to be balanced.



Lily

Who is correct? Prove it.



R

6b. Danny and Bella are solving the following algebraic equation.

$$20 \div 8x = 10$$



Bella

x must be $\frac{1}{4}$ for this equation to be balanced.

This equation is impossible because $20 \div 8 = 2.5$.



Danny

Who is correct? Prove it.



R

Two-Step Equations

7a. Use the cards below to create three balanced equations where $x = 0.2$. You must use a different operation in each equation.

-0.25 2.5 $5x$ -0.5
 1.5 $10x$ $1\frac{1}{2}$



PS

Two-Step Equations

7b. Use the cards below to create three balanced equations where $x = 0.25$. You must use a different operation in each equation.

-2.5 $12x$ $15x$ $\frac{1}{2}$
 $25x$ 1.5 $8\frac{3}{4}$



PS

8a. Choose a value for y and find three possibilities for each of the following equations.

A. $\square y \div \square = 6.5$

B. $\square y - \square = -2.5$



PS

8b. Choose a value for y and find three possibilities for each of the following equations.

A. $\square y \div \square = 1.75$

B. $\square y - \square = -0.75$



PS

9a. Alex and Priya are solving the following algebraic equation.

$$21x - 11.5 = -1$$



Alex

This equation is impossible as the answer is a whole number.

x must be 0.5 for this equation to be balanced.



Priya

Who is correct? Prove it.



R

9b. Oscar and Kelly are solving the following algebraic equation.

$$24x - 20.4 = -2.4$$



Kelly

This equation is incorrect because 24 is larger than 20.4 so there will not be a negative answer.

x must be 0.75 for this equation to be balanced.



Oscar

Who is correct? Prove it.



R