

Back to School Maths



Word Problems Level 4

1. The teacher created some magic square puzzles to keep his mind sharp during the school holidays. Unfortunately, he couldn't find the answer sheet. Can you devise a solution for him so that the sum of the three numbers in each row, column, and diagonal add up to the same amount, the magic number? Can you come up with two different solutions?

18		
	18	
		18

18		
	18	
		18

2. Teachers and students often enjoy puzzles and codes of all kinds. One idea to explore is creating a puzzle for someone to decode and then unjumble. Solve the example below as inspiration and then design one for someone else to solve.

The number answer to each equation has a corresponding letter of the alphabet (A=1, B=2, C=3, etc.).

Instructions:

1. Solve each equation to find x .
2. Find the corresponding letter for that number.
3. Unscramble the word.

Question:	Answer:
1. $\frac{x}{2} = 7$	$x =$ _____ number $x =$ _____ letter
2. $3x - 7 = 2$	$x =$ _____ number $x =$ _____ letter
3. $5(x - 3) = 17 + 8$	$x =$ _____ number $x =$ _____ letter
4. $3x = 36$	$x =$ _____ number $x =$ _____ letter
5. $22 + 41 = 3x$	$x =$ _____ number $x =$ _____ letter
	Word =

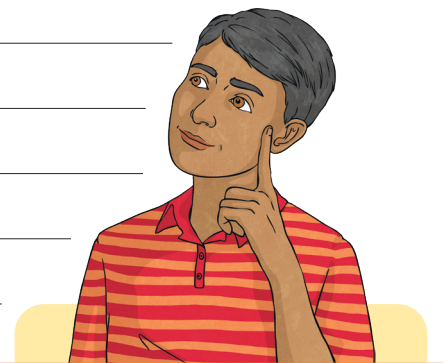
4. The senior students made some welcome-to-school books and games for the new junior students starting school. The total number of books and games created was 13. The number of games created was one more than twice the number of books written. How many books (x) and games (y) did the students make?

If $x + y = 13$ and $y = 2x + 1$, can you solve the mathematical equation?

5. During the holidays, the school principal visited three times as many countries as any of the students did. Together they visited a total of 12 countries. How many countries did the principal (x) and the students (y) each visit?

If $y = 3x$ and $x + y = 12$, can you solve the mathematical equation?

6. Can you write some of your own word problems and equations for someone else to solve?



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Word Problems Level 4 Answers



1.

18	30	6
6	18	30
30	6	18

18	20	16
16	18	20
20	16	18

2.

Instructions:

- Solve each equation to find x .
- Find the corresponding letter for that number.
- Unscramble the word.

Question:	Answer:
1. $\frac{x}{2} = 7$	$x = 14$ number $x = \underline{N}$ letter
2. $3x - 7 = 2$	$x = 3$ number $x = \underline{C}$ letter
3. $5(x - 3) = 17 + 8$	$x = 8$ number $x = \underline{H}$ letter
4. $3x = 36$	$x = 12$ number $x = \underline{L}$ letter
5. $22 + 41 = 3x$	$x = 21$ number $x = \underline{U}$ letter
	Word = LUNCH

3. Students may use any or all of the following to help them find the solution.

$$4x + 9 = 57$$

$$57 - 9 = 48$$

$$4x \div 4 = 48 \div 4$$

$$x = 12$$

The thickness of each of the other boxes is 12cm.

$$\begin{aligned}4. \quad x + y &= 13 \\ x + (2x + 1) &= 13 \\ 3x + 1 &= 13 \\ 3x &= 12 \\ x &= 4 \\ y &= 9\end{aligned}$$

The students made 4 books and 9 games.

$$\begin{aligned}5. \quad x + y &= 12 \\ x + 3x &= 12 \\ 4x &= 12 \\ x &= 3 \\ y &= 9\end{aligned}$$

The students visited 3 countries and the principal visited 9 countries.

6. All answers will vary.