

Back to School Maths

Word Problems Level 3+



Instructions

Read each question carefully and find the relevant mathematical information.

Write the question and answer as a maths equation to show your understanding.

Example: If I had ten lollies and I shared them between two friends, how many lollies would they get each?

As a maths equation and answer, it would be written as $10 \div 2 = 5$

Useful mathematical symbols to use in your answers include:

$+$ $-$ \times \div $<$ $=$ \neq $>$

1. An argument has broken out. The score during the annual back-to-school teachers versus students hockey game was declared a draw, with the teachers scoring 18 points in the first half and 14 in the second half. The team of students scored 16 points in the first half and 17 in the second half. The students are sure that they won.

Can you write a **maths equation** to describe the score stated above, depending on whether it is or isn't a draw?

2. In the new computer suite at school, there are 16 large tables with seven computers at each. How many computers are there altogether?

Can you solve this problem and **write it as a mathematical equation**?



3. In preparation for the back-to school shopping rush in January, the stationery store produced 10,850 school books in November and in December they produced 12,400 school books.

Can you **record this information using symbols and numbers** to show which month was more productive with the number of school books made?

4. The school office manager was busy making the teachers' stationery packs for when they started back at school. She had 152 stationery items to sort, and there were 8 teacher packs to fill. How many stationery items would go in each teacher's pack?

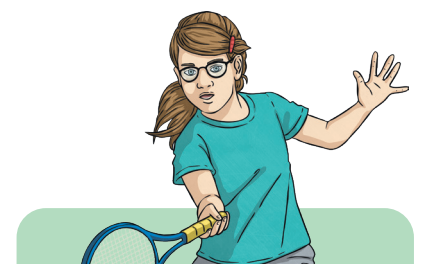
Can you **record this information using numbers and symbols** instead of words?

5. My brother and I checked our holiday job savings at the end of the holidays. I had saved \$176 and my brother had saved \$157. What was the difference in the amount that we had saved?

Can you **record this information using numbers and symbols** to show the difference?

6. The teacher was double-checking that the school had enough tennis balls for each class to use on the new tennis courts. He counted the tennis balls and found that he had 372. He knew the tennis balls had to be shared equally between the 12 classes. How many tennis balls would each class receive?

Can you **record the above information as a maths equation and solve it?**



7. In checking the stationery packs, the office manager found that she had ordered too many glue sticks and decided to put some away for next year. She had ordered 1,750 but only needed 835. How many did she put away for next year?

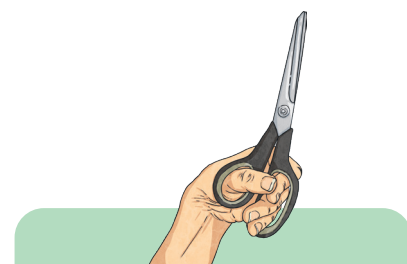
Can you record the above information as a maths equation and solve it?

8. At school, the students were selling raffle tickets as a fundraiser for their term one camp. They made \$275 in total. If they sold the tickets over 5 days, how much money did they make per day, on average?

Can you solve this problem and write it as a mathematical equation?

9. The classroom teacher had set aside \$120 for a new set of class scissors. She found some on special at a well-known NZ department store for only \$95. How much money did she have left if she also received an additional \$8 discount for being a frequent shopper?

Can you solve this problem and write it as a mathematical equation?



10. To stop an argument between two teachers, the principal calculated that both the intermediate and secondary departments had been given the same number of devices to distribute to their teaching staff. The intermediate department had been allocated 172 tablets, 128 laptops and 100 desktop computers. The secondary department had been allocated 200 laptops, 80 desktop computers and 120 tablets.

a. Can you write the equation that shows that the number of devices in each department was the same?

b. Write the equation that shows the total number of devices that were allocated for use across both departments.

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Word Problems Level 3+ Answers



1. $18 + 14 \neq 16 + 17$ or $18 + 14 < 16 + 17$

2. $16 \times 7 = 112$

3. $12,400 > 10,850$

4. $152 \div 8 = 19$

5. $\$176 - \$157 = \$19$

6. $372 \div 12 = 31$

7. $1,750 - 835 = 915$

8. $\$275 \div 5 = \55

9. $\$120 - (\$95 - \$8) = \33 or $\$120 - \$87 = \$33$ or $(\$120 - \$95) + \$8 = \33

10. a. $172 + 128 + 100 = 200 + 80 + 100 + 20$ therefore, $400 = 400$
b. $400 + 400 = 800$