



Name: _____

Date: _____

Problem Sum Worksheet

Topic : Percentage

Video Solution: <http://www.omyclassroom.com/percentage.html>



Percentage discount - Qn 1 (Difficulty: Medium)

Mr Lau bought a tennis racket and a bag at discounted prices. He spent a total of \$168.75 on the two items. The ratio of the amount Mr Lau paid for the tennis racket to the amount he paid for the bag was 2 : 1.

- (a) Find the cost of the bag after the discount.
- (b) The total discount given for the two items was \$31.25. Mr Lau was given a 10% discount for the tennis racket. What was the percentage discount given for the bag?

Percentage discount - Qn 2 (Difficulty: Low)

Jeremy paid \$175 for a camera after a discount of 30 %. What was the price of the camera before the discount?

Percentage discount - Qn 3 (Difficulty: Low)

Jenny paid \$69 for an electric kettle after a discount of 40%.
What was the price of the kettle **before** the discount?

Percentage discount - Qn 4 (Difficulty: Medium)

Mrs Wong bought a rice cooker for \$126 after a discount of 30%.

- (a) What was the price of the rice cooker before discount?
- (b) She paid \$40 for a toaster. The total discount for the rice cooker and the toaster was \$64. What was the percentage discount given for the toaster?

Percentage discount - Qn 5 (Difficulty: Medium)

Mrs Cheng bought a bag and a pair of shoes at a discount. She spent a total of \$57.60 on these two items. She spent \$9.60 more on the shoes than on the bag.

- (a) How much did she spend on the shoes?
- (b) The total discount given for the two items was \$22.40. She was given a 25% discount for the bag. What was the percentage discount given for the shoes?

Percentage change – Qn 1 (Difficulty: Medium)

In March, Siew Leng was given a monthly allowance of \$250. She spent 50% of it on food and transport and 20% of it on books and saved the rest. In April, the monthly allowance increased. Siew Leng was able to increase her spending on books by 30% and spent another 10% more on food and transport compared to the month of March. She saved the same amount of money for both months.

- a) How much did Siew Leng spend on books in April?
- b) By what percentage did the monthly allowance increase?

Percentage change – Qn 2 (Difficulty: High)

Lisa had a collection of stamps from Australia, France and Japan. She had 124 stamps from Australia. 30% of her stamps were from France. She had 12 fewer stamps from Japan than from France.

- (a) What was the total number of stamps in Lisa's collection?
- (b) Lisa's aunt gave her some stamps from France. Her total collection increased by 25%. What percentage of her collection was from France after that?

Percentage change – Qn 3 (Difficulty: High)

At first, Lisa had a total of 66 blue and pink balloons. 17 pink balloons burst. She then increased the number of blue balloons by 75%. After that, Lisa had a total of 79 balloons. How many pink balloons did she have at first?

Percentage of remaining (Layering method) – Qn 1 (Difficulty: Medium)

Martin withdrew 33% of his savings from the bank. He spent \$548 on a mobile phone and the remaining \$46 on some phone accessories. After receiving his salary, he deposited 25% of it into the bank. As a result, he had \$3480 in the bank. What was Martin's salary?

Percentage of remaining (Layering method) – Qn 2 (Difficulty: Medium)

During the Christmas sale, Mrs Chen bought an oven and a washing machine at a discount. She spent a total of \$1086 for these two items. She spent \$414 less on the oven than on the washing machine.

- a) How much did she spend on the washing machine?
- b) The total discount given for the two items was \$644. She was given a 40% discount for the washing machine. What was the percentage discount given for the oven?

Percentage of remaining (Layering method) – Qn 3 (Difficulty: Medium)

Ken spent 60% of his money and an additional \$8 on a book. He spent 50% of his remaining money and an additional \$15 on a game. He was left with \$25. How much money did he have at first?

Percentage of remaining (Layering method) – Qn 4 (Difficulty: Medium)

Kelly spent 20% of her money and an additional \$4 on a haircut. She spent 30% of her remaining money and an additional \$6 on a dress. She was left with \$36. How much money did she have at first?

Percentage of remaining (Layering method) – Qn 5 (Difficulty: Medium)

Mr Wong had a number of books for sale. He sold a total of 342 books on Saturday and Sunday. On Monday, he sold $\frac{1}{4}$ of the remainder. He was left with 18% of the books he had at first. How many books did he have at first?

Percentage and unit – Qn 1 (Difficulty: Hard)

At a fund-raising event, 60 % of the people were male and the rest were female. 20% of the females left the event in the afternoon. In the evening, after 33 males and 35 females left the event, 75% of the people at the event were males.

- a) What percentage of the people left the event in the afternoon?
- b) How many people were there at the start of the fund-raising event?

Saving and spending – Qn 1 (Difficulty Medium)

Gerald was given a fixed amount of pocket money each month. In January he spent \$50 and saved the rest. In February he spent 10% less and his savings increased by 25%. How much was Gerald's pocket money for each month?