

YEAR 8 MATHEMATICS WEEK 10 2020 (TERM 1)

Year: 8

Date: Tuesday 7 April 2020

STRAND: NUMBERS

TOPIC: PERCENTAGE (%)

LESSON OUTCOME: At the end of this lesson student(s) should be able to Calculate
Decimal Money questions.

Instructions: Hi dear Parents/Guardians and students - In this Lesson students are going to find % of amounts (dealing with money) and do the selected questions for **Exercise 4.2**.

*[Note that all the Quizzes/Test and or Assignment will be based on the selected questions for each exercise. These lessons are designed for **one hour per Lesson**.]*

What to do: Do the following selected questions

Exercise 4.2: Question 1, Question 5, Question 6

Solutions: Solutions will be available online via

<https://www.facebook.com/centralschoolemergencyforum/posts/108720557434149>

Decimal Money Questions

Many countries use a decimal number system for their money. For example, Australia, New Zealand and America use dollars and cents. There are 100 cents in one dollar.

So \$12.46 means 12 dollars and 46 cents.

EXERCISE 4.2

1. The Millar family won \$3000 on Lotto. They decided to update their TV/ stereo equipment and purchased the following items:
 - a colour TV \$549
 - a video player \$499
 - a TV/video cabinet \$240
 - a pack of 5 VHS tapes \$52
 - a compact disc player \$370
 - a tape deck \$345
 - a turntable \$269.
 - a. What was the total cost of all this equipment?
 - b. How much money would be left from the Lotto winnings?
2. Mr Sarris went to a sale at his local store. The prices he paid are listed here, with the regular prices in brackets:
 - a Kodak film \$3.95 (\$4.65)
 - a clock radio \$35 (\$38.76)
 - a jumper \$22.45 (\$25.98)
 - a pair of trousers \$26.98 (\$32.99)
 - 4 litres of paint \$15.98 (\$19.96)
 - a torch \$4.48 (\$5.47)
 - a. How much did Mr Sarris spend altogether?
 - b. What would the total cost have been if he had had to pay the regular prices?
 - c. Use your calculator to find the amount he saved on each item.
 - d. Check Mr Sarris' total savings, using these two methods:
 - i. subtract answer a from answer b.
 - ii. add the individual savings from c.

3. Johnny wondered if he could afford to leave home to live in a flat. His weekly wage was \$290. He considered the weekly costs:
- rent \$95
 - car repayments \$60
 - petrol \$20
 - electricity \$12
 - food \$70
 - banking to cover car insurance and registration \$10
 - clothing \$12
- a. What is the total of all the costs that Johnny has considered?
 - b. How much would he have left from each weekly pay for entertainment and other costs?
 - c. What are some other costs that Johnny should have considered?
4. Laila has recently bought her first car. Her repayments total \$1927.80 per year. It cost \$260.75 to register the car. To insure the car costs \$324.90. Repairs and services for the year total \$ 266. What is the total cost of keeping the car for one year if we also include the cost of petrol at \$988 per year.
5. Leesa wrote a shopping list showing those items (in order of preference) that she would like to buy if she had enough money:
- a nightshirt \$12.45
 - a denim bag \$17.87
 - earrings \$4.98
 - a record \$11.98
 - moccasins \$19.90
 - leg warmers \$6.97
 - a calculator \$12.50
 - a craft book \$5.35
 - a set of textas \$3.60
- a. If Leesa had \$88 in her savings what would be the last item from her list that she could afford to buy?
 - b. How much more does she need to save so that she can afford to buy all the items on her list?

EXERCISE 4.2 (continued)

6. Arun opened a savings account at the bank and a page from his passbook is shown here. Calculate the amounts that should be written in the spaces.

Date	Deposits	Withdrawals	Balance
15.11.96			\$86.40
22.11.96	\$16.72		<u> a </u>
16.01.97	\$35.95		<u> b </u>
17.01.97		\$25.60	<u> c </u>
23.01.97		\$40.50	<u> d </u>
24.01.97	<u> e </u>		\$108.57
07.01.97		<u> f </u>	\$45.72

Using Percentages with Money

A **discount** is an amount of money taken off the full price or total. The discount is usually written as a percentage.

Example: A CD player is priced at 60000vt. The store is offering a 15% discount. Find a. the discount and b. the new selling price.

a.

$$\begin{aligned}
 &15\% \text{ of } 60000 \\
 &= \frac{15}{100} \times \frac{60000}{1} \\
 &= 9000\text{vt}
 \end{aligned}$$

b.

$$\begin{aligned}
 &\text{New price} = \text{Marked price} - \text{discount} \\
 &= 60000 - 9000 \\
 &= 51000\text{vt}
 \end{aligned}$$