Multiple-choice section – choose the correct answer

Question 1 [1.1]

Josephine scores 12 out of 20 shots in a game of netball. What is her shooting accuracy as a percentage?

A 40% B 50% C 60% D 70%

Question 2 [1.2]

What is the sale price of a pair of shoes that retail at $270.00 but are discounted by 40%?

A $162.00 B $200.00 C $108.00 D $42.00

Question 3 [1.3]

Koon-Siong works as a car salesperson. In a week, he earns $180.00 plus 2.8% of the value of any car that he sells. In one week of work, he sells one car for $16 000 and another for $11 999. What does Koon-Siong earn in that week?

A $783.97 B $963.97 C $5700.96 D $1063.96

Question 4 [1.4]

Marijke is a beautician who earns $39 120 per annum. She donates $10.00 per month to recognised charities and pays $115 for her membership of the Australian Beautician’s Association. What is her taxable income?

A $37 330 B $37 480 C $39 200 D $38 885

Question 5 [1.5]

$950.00 is invested for eight years in a bank paying simple interest at a rate of 4.9% p.a. How much simple interest will be earned?

A $48.51 B $166.70 C $372.40 D $1322.40

Question 6 [1.6]

The ironically named Free Bank has the following monthly fees:

\* $5.00 account-keeping

\* $0.10 for the first four withdrawals from a Free Bank ATM

\* $0.90 for additional withdrawals from a Free Bank ATM

\* $1.80 for withdrawals from the ATM of a different bank

\* $0.50 per EFTPOS transaction

\* $0.10 per online transfer

In one month, Saako withdraws money 12 times from a Free Bank ATM, five times from a different bank’s ATM, and she also completes two EFTPOS transactions and three online transfers. What does she pay in charges?

A $22.90 B $23.90 C $25.90 D $27.90

Question 7 [1.7]

Zachary uses a 4020 W sound system for 3 hours each day. What are the respective daily energy consumption and running cost, given that the tariff is 14.2 cents/kWh?

A 4.02 kWh; $1.95/day B 12.06 kWh; $1.95/day   
C 12.06 kWh; $1.71/day D 3 kWh; $1.95/day

Question 8 [1.8]

Ola has a 24-month internet plan with a minimum monthly spend of $58. Her contract states that the early exit fee is the minimum monthly spend multiplied by the number of months left on her contract, plus an extra $110.00 if she leaves within the first 6 months. Ola exits the plan after 4 months. What is her early exit fee?

A $1270 B $1102 C $1121 D $1212

Multiple-choice results: \_\_\_ / 8

Short answer section

Question 9 2 marks [1.4]

Use words from the list below to complete the following sentences.

credit card rate of interest principal EFTPOS discount buy on terms

Some stores allow customers to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Under this arrangement, customers are often given an interest-free period. After this time, if the amount owing has not been fully paid off, customers are expected to pay a high \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. To avoid potentially paying interest, some people choose to use cash or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to pay for goods rather than a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Question 10 2 marks [1.1]

(a) Find 45% of $200.

(b) Decrease $80 by 15%.

Question 11 2 marks [1.1]

A bag of lollies is on sale for $2.29. The saving is $0.20. Work out the saving as a percentage of the original price, correct to 1 decimal place.

Question 12 2 marks [1.2]

A supermarket has a policy of marking up the cost prices of their goods by 60%. Calculate the cost price of a toothbrush that was sold for $2.20. Round your answer to the nearest cent.

Question 13 4 marks [1.3]

Gamble is working part-time for a butcher. Her job is covered by an agreement which includes:

\* a base wage of $15.00 per hour for up to 40 hours over the Monday–Friday working week

\* payment of time-and-a-half for any work completed on a Saturday

\* payment of double time for any work completed on a Sunday.

Last week, Gamble worked 20 hours during the week, 4 hours on Saturday and 5 hours on Sunday.

What was she paid (before tax) for the week?

Question 14 3 marks [1.3]

During the school holidays, Cheong gets a job photocopying documents for a busy accountancy firm. He is paid 3 cents per page copied. Cheong copies an average of 1700 sheets per day. How much, on average, is Cheong paid if he works for 5 full 5-day weeks out of his 7-week holiday?

Question 15 3 marks [1.4]

The following table shows the Australian income tax rates in the 2015–2016 financial year.

|  |  |
| --- | --- |
| Taxable income | Tax on this income |
| $0 – $18 200 | Nil |
| $18 201 – $37 000 | 19c for each dollar over $18 200 |
| $37 001 – $80 000 | $3572 + 32.5c for each dollar over $37 000 |
| $80 001 – $180 000 | $17 547 + 37c for each dollar over $80 000 |
| $180 001 and over | $54 547 + 45c for each dollar over $180 000 |

(a) Yani’s taxable income is $75 000. Which bracket does he fall into?

(b) How much tax does he pay in one year?

(c) Sake’s taxable income is $92 000. Which bracket does she fall into?

(d) How much tax does Sake pay in one year?

Question 16 3 marks [1.4]

Ping earns a gross salary of $45 000 per year. She makes voluntary superannuation contributions of $25 each month. Further to that, her employer contributes an additional amount that is worth 9% of her gross pay. Assuming that Ping’s salary and contributions remain constant, how much money goes into Ping’s superannuation account each year?

Question 17 3 marks [1.5]

Belinda borrows $6000 to go on a tour of Asia. She repays the debt after 4 years and 8 months. The loan is a simple interest agreement, payable quarterly. The rate is 17% per annum. The terms of this (unfair) loan ignore the fact that the repayments are reducing the amount owed.

(a) How much interest did Belinda pay quarterly?

(b) Over the course of 4 years and 8 months, how much does Belinda repay in total?

Question 18 3 marks [1.6]

Mary purchases a $450.00 outfit on lay-by. She pays a deposit of $120.00 and then pays $20.00 each week until the outfit has been fully paid.

(a) If the Spring Racing Carnival begins in 18 weeks, will Mary be able to wear her new outfit for the first day of the carnival?

(b) By the time Mary gets to her last payment, she no longer owes $20.00. How much does she owe?

Question 19 3 marks [1.7]

Complete the following unit conversions.

(a) 3500 kL = \_\_\_\_\_\_\_\_\_\_\_\_\_\_ L

(b) 90 232 W = \_\_\_\_\_\_\_\_\_\_\_\_\_ kW

(c) 3 MJ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ J

Question 20 3 marks [1.7]

Michelle, who is environmentally aware, showers for three minutes. Her showerhead delivers 14 L/min.

(a) How many litres of water does Michelle use when showering?

(b) Assuming Michelle has one shower every day, how much water will she use for her showers in one year?

(c) If water costs $1.29 per kilolitre (kL), how much will Michelle’s showers cost for the year? Give your answer to the nearest cent.

Question 21 2 marks [1.7]

(a) Frederik receives his gas bill and is $113.91 in credit. His new charges, before GST, are $210.65. GST of 10% is applied to the new charges. Taking his credit amount into account, what does Frederik owe on this bill?

(b) Simba’s household uses 13 380 MJ of energy when burning gas over the last billing cycle. At his property, the heating value is 28.23 (this refers to the number of MJ produced by burning 1m3 of gas). The correction factor is 1.003.

energy (MJ) = volume (m3) × heating value × correction factor

Use this rule to calculate the volume of gas burnt by Simba’s household. Round your answer to 2 decimal places.

Question 22 1 mark [1.8]

Calculate the minimum spend required on a $120.00 per month home phone and internet plan over 24 months.

Question 23 4 marks [1.8]

Ian puts credit on to his phone. The pre-paid call rate of his company is 92c/min, plus a flagfall of 20c. Text messages are charged at 25 cents each.

(a) Calculate the combined cost of a 2-minute phone call, a 3-minute phone call, a 10-minute phone call and 23 text messages.

(b) Ian’s mother gives him $25.00 to use as credit. Can he make these calls and send these messages without adding more credit?

Short answer results: \_\_\_ / 40

Extended answer section

Question 24 7 marks [1.6]

Du wants to buy a $1400 sound system but does not have the money. He commits to a payment plan. Initially, he pays an application fee of $30, plus a deposit of $200. He has to make a minimum monthly payment of 5% of the amount left after the deposit, and he pays a monthly account fee of $3.50. Du is offered an interest-free period of 12 months. If the balance has not been paid by the end of this time, Du must pay 32% p.a. interest on the amount still owed after 12 months, each month, until the loan has been repaid.

(a) How much does Du pay in fees over the first 12 months of repayments?

(b) Initially, Du is determined to repay the loan within 12 months. After his initial application fee and deposit, how much must he pay each month, inclusive of fees, to ensure that this will occur?

(c) Du realises that he cannot afford to repay the loan within 12 months. Calculate the minimum amount he will need to repay each month (remember to include any fees).

(d) If Du pays the minimum amount calculated in **(c)**, how much does he still owe after 12 repayments?

(e) Calculate the amount of interest Du has to pay in the 13th month. (Assume 30 days in the month.)

Extended answer results: \_\_\_ / 7

TOTAL test results: \_\_\_ / 55