



Year 9 Mathematics

Financial Mathematics Practice Test 3

Name _____

- 1 Convert 18% to a fraction
- 2 Convert $\frac{11}{20}$ to a percentage
- 3 Convert 9% to a decimal
- 4 Convert 0.51 to a percentage
- 5 Find 35% of 600 m
- 6 Increase \$80 by 15%
- 7 Betty has a part-time job selling building products which pays \$100 pw and 2% commission on sales made
 - a How much would an Betty earn in a week if she made no sales?
 - b If Betty sold \$18 000 worth of building products in one week, how much would she earn?
 - c If Betty sold \$24 000 worth of materials in one week and \$5000 worth in the next, find his average weekly income for the two weeks.
- 8 Luke has a casual job from 4:00 pm till 5:30 pm Monday to Friday. He also works from 9 am till 12:30 pm on Saturdays. Find his weekly income if his casual rate is \$8.80 per hour Monday to Friday, and \$11.50 an hour on Saturdays
- 9 During one week Jack worked 35 hours at the normal rate of \$11.60 per hour. He also worked 6 hours overtime: at 'time-and-a-half' and 2 at 'double-time'. How much did he earn?
- 10 Calculate Jill's holiday loading if she is given 17½ % of four weeks salary and she earns \$980 per fortnight.
- 11 Find the net pay for the week if John earns \$423.60, is taxed \$67.80, pays \$32.10 for superannuation and has miscellaneous deductions totalling \$76.30. What percentage of his gross pay did he pay in tax?

Taxable income	Tax on this income
0 – \$18,200	Nil
\$18,201 – \$37,000	19c for each \$1 over \$18,200
\$37,001 – \$80,000	\$3,572 plus 32.5c for each \$1 over \$37,000
\$80,001 – \$180,000	\$17,547 plus 37c for each \$1 over \$80,000
\$180,001 and over	\$54,547 plus 45c for each \$1 over \$180,000

- 12 Alan received a salary of \$47 542 and a total from other income (investments) of \$496 His total tax deductions were \$1150. During the year he had already paid tax instalments amounting to \$10 710.75. Find:
- his total income
 - his taxable income
 - how much Alan must pay as his Medicare levy
 - the tax payable on his taxable income
 - his refund due or balance payable when the Medicare levy is included
 - how much extra Alan would receive each week if he is given a wage rise of \$10 per week
- 13 Tom was able to borrow \$36 400 at 8.5% p.a simple interest for 4 years. How much interest did he pay altogether?
- 14 Find the simple interest on \$600 at 11% p.a for
- 1 year
 - 3 years

ANSWERS

Question 1

$$\frac{9}{50}$$

Question 2

$$55\%$$

Question 3

$$0.09$$

Question 4

$$51\%$$

Question 5

$$210 \text{ m}$$

Question 6

$$\$92$$

Question 7

a) Week's earnings = $\$100 + 2\%$ of $\$0 = \$100 + \$0$

\therefore Betty making no sales is paid $\$100$.

b) Betty's earnings = $\$100 + 2\%$ of $\$18\,000 = \$100 + 0.02 \times \$18\,000$

$$= \$460 \text{ in the week}$$

c) *Week 1*

$$\text{Betty's earnings} = \$100 + 2\% \text{ of } \$24\,000 = 100 + 0.02 \times 24\,000$$

$$\therefore \text{Earnings week 1} = \$580$$

Week 2

$$\text{Betty's earnings} = \$100 + 2\% \text{ of } \$5000 = \$100 + 0.02 \times \$5000$$

$$\therefore \text{Earnings week 2} = \$200$$

$$\therefore \text{Betty's average weekly wage} = (\$580 + \$200) \div 2 = \$390$$

Question 8

$$\begin{aligned} \text{Luke's weekly income} &= 1\frac{1}{2} \times 5 \times \$8.80 + 3\frac{1}{2} \times \$11.50 \\ &= \$106.25 \end{aligned}$$

Question 9

$$\text{Jacks earnings} = (35 \times 11.6) + (4 \times 11.6 \times 1.5) + (2 \times 11.6 \times 2) = \$522$$

Question 10

$$\begin{aligned} \text{Jill's holiday Loading} &= 17.5 \div 100 \times (980 \times 2) \\ &= \$343 \end{aligned}$$

Question 11

$$\begin{aligned} \text{Net Pay} &= \$423.60 - \$67.80 - \$32.10 - \$76.30 \\ &= \$176.20 \end{aligned}$$

$$\begin{aligned} \text{Tax as a percentage of gross pay} &= \frac{67.80}{423.60} \times 100 \\ &= 16\% \end{aligned}$$

Question 13

$$\$36\,400 \times 0.085 \times 4 = \$12\,376$$

Question 14

- a) \$66 b) \$198