

Name: _____

TOPIC TEST

Incomes and budgets

- Time allowed: 45 minutes
- Part A: 20 multiple-choice questions (20 marks)
- Part B: 7 free-response questions (30 marks)
- Total: 50 marks

PART A

20 multiple-choice questions

1 mark each: 20 marks

Circle the correct answer.

- 1 $\frac{3.6\%}{12} + \frac{6.8\%}{4}$ is
- A 0.02
 B 0.0317
 C 0.317
 D 0.002
- 2 Which of the following values is the largest?
- A $\frac{1}{20}$
 B $\frac{31}{600}$
 C 0.048
 D 4.5%
- 3 The hardness (calcium carbonate) in a particular town's water supply was 215 mg/L one month and 225mg/L the next month. What is the percentage increase?
- A 4.44%
 B 4.48%
 C 4.65%
 D 4.66%
- 4 Which pay is the highest annually (assume a standard 38-hour week)?
- A \$25.80/h
 B \$2017/fortnight
 C \$4353.60/month
 D \$53 500 p.a.

- 5 The basic adult rate for a shop assistant is \$19.44 per hour. Sarah is 18 years old and works a 38-hour week at 70% of the adult rate. Jaxon is 19 years old and works 34 hours a week at 80% of the adult rate. Who earns more and by how much?
- A Jaxon \$14.30
B Sarah \$11.67
C Jaxon \$11.67
D Sarah \$14.30
- 6 Kylie earns \$161.50 extra in a week where she worked 5 hours overtime one day, but no other overtime. The first 3 hours were at time-and-a-half and the remainder at double time. What is her normal hourly rate of pay?
- A \$19.00
B \$19.50
C \$32.30
D \$24.70
- 7 Walid worked for 4 hours on Sunday at 1.75 times the normal hourly rate and earned \$162.05. How much would he earn for a 5-hour Saturday shift where he gets 1.25 the normal hourly rate?
- A \$128.50
B \$253.20
C \$173.63
D \$144.69
- 8 Rachel works 38 hours at the normal rate, 3 hours at time-and-a-half and 2 hours at double time. She earns \$1143.90. How many hours would she need to work at the normal rate of pay to earn the same amount?
- A 44.5
B 43
C 46
D 46.5
- 9 Boun earns 6.5 cents for each brochure he delivers. How many brochures does he need to deliver to earn \$91?
- A 1300
B 1400
C 140
D 130
- 10 Tyson works for a marine broker. His pay this week was \$1146. This included a retainer of \$623 and a 2% commission on the boats he sold. Which of the following expressions gives the dollar value of the boats Tyson sold?
- A $(1146 - 623) \times 0.02$
B $(1146 - 623) \div 0.02$
C $(1146 + 623) \times 0.02$
D $(1146 - 623) \div 0.2$

11 Marguerita delivered 25 pizzas between 5:45 p.m. and 10:15 p.m. and was paid \$7.30 per delivery. What was her average hourly rate of pay?

- A \$40.56
- B \$52.14
- C \$33.18
- D \$45.63

12 A property sells for \$830 000. The real estate agency charges 2.5% commission and the agent receives 45% of this. How much does the agent receive?

- A \$7470
- B \$8300
- C \$9337.50
- D \$9225

13 Shania is single, over 18 and is living away from home to study. The maximum youth allowance she can receive a fortnight is \$437.50 and this amount reduces by 50 cents for each dollar earned over \$433 and 60 cents for each dollar earned above \$524. How much will Shania receive if she earns \$530 per fortnight?

- A \$336.50
- B \$348.80
- C \$388.40
- D \$389.60

14 While completing an apprenticeship, Shania receives the maximum fortnightly Austudy payment of \$527.50. How much will she receive over an 18-month period?

- A \$18 900
- B \$9495
- C \$18 990
- D \$20 572.50

15 In the last fortnight, Tom's expenses were for rent, phone, tenpin bowling, cinema, electricity, gym, transport, magazines and groceries. Which ones were discretionary expenses?

- A rent, gym, transport, groceries
- B tenpin bowling, cinema, gym, magazines
- C electricity, transport, cinema, magazines
- D rent, electricity, transport, groceries

16 How much does Tristan save in a fortnight?

| Tristan's weekly budget | |
|-------------------------|---------------------|
| Income | Expenses |
| After-school job \$107 | Fuel \$45 |
| Lead singer/band \$215 | Phone/Internet \$35 |
| | Entertainment \$75 |
| | Miscellaneous \$28 |
| | Savings ____ |
| Total: | Total: |

- A \$278
- B \$276
- C \$390
- D \$392

Use the following information for questions 17, 18, 19 and 20.

Janis lives in Cairns and is planning to do a Fun Run on the Gold Coast later on in the year. She has made some enquiries and has listed all her expected costs at today's prices, but will be saving over the next 5 'pays' before making any bookings.

Flight to Gold Coast \$157
 Return flight \$286
 Airport transfers \$23 each way
 Accommodation 3 nights \$800
 3 Lunches @ \$20 each
 3 Dinners @ \$35 each
 Tour \$120
 Cost of Fun Run \$70
 Massage \$60
 Miscellaneous outings \$100

17 Calculate her total expected costs.

- A \$1671
- B \$1694
- C \$1804
- D \$1824

18 Janis allows an extra 10% for price variations. How much does she allow altogether (to the nearest dollar)?

- A \$1833
- B \$1865
- C \$1984
- D \$2007

19 How much should Janis save each pay?

- A \$373
- B \$366.60
- C \$401.40
- D \$396.80

20 What percentage of her expected costs (not including the extra 10%) are travel and accommodation?

- A 70.2%
- B 71.5%
- C 74.2%
- D 80.6%

PART B

7 free-response questions

30 marks

Show your working where appropriate.

- 21** Marty scored 57 out of 80 in his English test. In his Maths test, which was out of 64, Marty improved on his English test percentage score by 3.75%. What was Marty's Maths test result?

[3 marks]

- 22** Dodgy Dan's hourly rate for plumbing repairs increased by 105% to \$195. What was his charge before the increase? (Answer to the nearest 10 cents).

[2 marks]

- 23** The population of a town decreased by 15% to 11 917 over 4 years.

a What was the population 4 years ago?

b By how much did the population decrease over the 4 years?

[3 marks]

24 Felicity is a casual forklift driver who earns \$22.70 per hour at the normal rate. Overtime pay is calculated according to the table below.

| | Normal rate (\$17.85/h) | Time-and-a-half | Double time |
|----------|-------------------------|-----------------|-----------------|
| Mon–Thu | First 8 hours | Next 2 hours | Remaining hours |
| Saturday | – | First 2 hours | Remaining hours |
| Sunday | – | – | All hours |

There is also a Friday night shift rate of \$31.09 per hour.

This week, Felicity worked the following hours:

| Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|-----|-----|-----|-----|-----|-----|-----|
| 0 | 8 | 8 | 12 | 9* | 6 | 5 |

*night shift

Calculate her wages for:

a Tuesday and Wednesday

b Thursday

c the Friday night shift

d Saturday

e Sunday

f the whole week

[7 marks]

25 After completing school, Zac goes fruit picking. Each bag he fills holds 25 kg of fruit, which he then empties into wooden bins that can hold 450 kg of fruit. Zac is paid \$35.88 for each bin filled, and in a week he can fill 21 bins.

- a** How much can Zac earn in a 6-week period, assuming he picks the same quantity of fruit each week?

- b** How many bags would Zac fill with fruit over the 6 weeks?

[5 marks]

26 A Centrelink payment is reduced by 50 cents for each dollar earned over \$433 and 60 cents for each dollar earned above \$524.

- a** Calculate the reduction in payment for the first \$524 of income earned.

- b** Calculate the reduction in payment for the income earned above \$524 if the total reduction in payment was \$151.

- c** What income was earned to result in a reduction in payment of \$151?

[4 marks]

27 Damien shares a flat and pays \$130 per week towards the rent. He spends \$125 a week on groceries and \$48 a week on transport. Damien’s share of the quarterly electricity bill and the 2-monthly phone bill are \$64.35 and \$39 respectively. He earns \$1230 net per fortnight, spends about \$60 a week on entertainment, \$50 on sundry items and \$65 once a month at a sports injury clinic.

- a Convert Damien’s expenses to weekly amounts and draw up a weekly budget, including an amount for savings..

| Income | Expenses |
|---------------|---------------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| TOTAL: | TOTAL: |

- b Give 2 examples of possible sundry items that are discretionary expenses.

- c How many weeks will it take Damien to save \$3000?

- d What percentage of his net weekly wage does he save?

[6 marks]

This is the end of the test.

Answers
Part A

- 1 A 2 B 3 C 4 D 5 C
 6 A 7 D 8 D 9 B 10 B
 11 A 12 C 13 C 14 D 15 B
 16 A 17 C 18 C 19 D 20 B

Part B

21 48

22 \$95.10/h

23 a 14 020 b 2 103

24 a \$363.20 b \$340.50 c \$279.81

d \$249.70 e \$227 f 1460.21

25 a \$4520.88 b 2268

26 a \$45.50 b \$105.50 c \$699.83

27 a

| Income | Expenses | |
|-----------------------|----------------------|----------|
| Net weekly wage \$615 | Rent | \$130 |
| | Groceries | \$125 |
| | Transport | \$48 |
| | Electricity | \$4.95 |
| | Phone | \$4.50 |
| | Entertainment | \$60 |
| | Sundries | \$50 |
| | Sports Injury clinic | \$15 |
| | Savings | \$177.55 |
| TOTAL: \$615 | TOTAL: | \$615 |

b magazines, clothing

c 17 weeks

d 28.9%