|  |  |
| --- | --- |
| EGC_Black | Student Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    **Eastern Goldfields College**  Mathematics Essential U1 2017  Test 1 – Calculator Free1 |
|  | Total Marks: 22 marks |

**Time allowed: 15 minutes**

**No calculator or notes permitted for this section.**

***Answer all of the following questions. Show all working to obtain full marks.***

**Question 1** [5 marks – 1, 1, 1, 1, 1]

Round each number to the given accuracy:

1. 346 (nearest 10) (b) 27.48 (one decimal place)

(c) $72.634 (nearest dollar) (d) $$72.634 (nearest cent)

(e) $72.634 (nearest 5c)

**Question 2** [6 marks – 1, 1, 1, 1, 2]

(a) 14 + 6 3 (b) 4 (5 + (568))

(c) 15% of $800 (d) of $90

(e) Two students answer the following question:

30 5 2

Bob says the answer is 12 but Leo insists that the answer is 3. Who is correct and why?

**Question 3** [2 Marks]

Rachel bought a new pair of shoes in a ‘25% off’ sale. Normally the shoes cost $90. How much did Rachel pay for the shoes in the sale?

**Question 4** [1 Mark]

Write the set of numbers in order from smallest to largest.

53.7 53.8 53.745 53.81 53.75

**Question 5** [4 Marks 1, 1, 1, 1]

(a) Express as a decimal. (b) Express 65% as a decimal.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(c) Express as a percentage. (d) Express 0.25 as a fraction (Simplest form).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Question 6** [4 Marks 1,1, 1, 1]

In each pair, **circle** the amount that has the greater value.

(a) 0·7 or 80% (b)  or 75%

(c)  or  (d)  or 

|  |  |
| --- | --- |
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| **Time allowed: 35 minutes** | Total Marks: 25 marks |

**One A4 page of notes permitted in this section.**

**Question 1** [2 Marks]

Rhett has $45 000 saved. He is going to use two thirds of his savings as a deposit on a house. How much is his deposit?

**Question 2** [3 marks – 1, 2]

Christina sells Tupperware and earns 8% of the total sales. One week she had three parties, one valued at $1500, one valued at $2200 and one at $940.

1. What was the total value of sales for the week?
2. What commission did she earn?

**Question 3** [4 marks – 2, 2]

John has just commenced his first job ever at J-Mart earning $730 per week with 9.5% superannuation.

1. Calculate his superannuation for the week.
2. How many weeks will it take his superannuation to grow to $1000?

**Question 4** [6 marks – 1, 3, 2]

The distance to travel from Kalgoorlie to Esperance by road is 401km. A motorist will travel from Kalgoorlie to Esperance stopping in Kambalda East, Norseman and Grass Patch on the way. This is displayed in the table below:

|  |  |  |
| --- | --- | --- |
| Travel | | Distance |
| Kalgoorlie to Kambalda East | | 60 km |
| Kambalda East to Norseman | | 133 km |
| Norseman to Grass Patch | |  |
| Grass Patch to Esperance | | 81 km |
|  | Total | 401 km |

1. Fill in the missing distance
2. What percentage of the trip has been completed:

(i) On reaching Norseman ? (ii) On reaching Grass Patch?

1. How far from Kalgoorlie will the motorist be when the trip is:

(i) Half complete? (ii) Three quarters complete?

**Question 6** [3 marks – 1, 2]

Adrian asked 30 friends about their favourite barbecue food. The table below shows the results.

**(a)** For what fraction of the friends is seafood their favourite?

|  |  |
| --- | --- |
| Food | Number who chose it as their favourite |
| Sausages | 12 |
| Steak | 10 |
| Seafood | 8 |

**(b)** What proportion of the group prefers sausages? Express as a decimal

**Question 7** [7 marks – 5, 2]

Three online stores are selling iPad Airs for the following prices:

**RETRO VISUAL**

iPad Air

$720

OFF

**HARDLY NORMAL**

iPad Air

$709

15% OFF

**RICK SMYTH’S**

iPad Air

$605

1. Which store offers the best deal and by how much? Show working to support your answer.
2. Each store has postage charges as follows:

Rick Smyth’s - $25 Hardly Normal - $15 Retro Visual - $19.95

Does this affect which store you choose? Explain with calculations.

END OF TEST