

UNIVERSITY OF NAMIBIA

SUBJECT	MATURE AGE ENTRY TEST
SUBJECT AREA	NUMERACY(SCIENCE-RELATED)
DATE	03 August 2019
DURATION	2 HOURS MARK:100

This question paper consists of 3 pages including the cover page

Instructions

- Show your calculations.
- Calculators are allowed
- Round answers to one Decimal Place where Needed
- Answer all questions in the given examination answer book

1. Find the length of time between 5.35am and 3.15pm the next day [3]
2. A room is x meters long and y meters wide, the Perimeter of the room is given by the formula $P = 2x + 2y$
 - (a) Find the perimeter of the room, P if $x = 4.25$; $y = 3.4$ [2]
 - (b) Calculate the area A of the room if $x = 4$; $y = 3$ [2]
3. A teacher travels from Rundu to attend a workshop in Windhoek . The journey is 715 kilometers each way.Travel expenses may be claimed at N\$ 2.65 per kilo meter.
 - (a) How much is the teacher entitled to claim for travel expenses? [5]
 - (b) As an approximation 8 kilometers is equal to 5 miles, using this approximation how long is the journey from Rundu to Windhoek in miles? [3]
4. An article cost y dollars and is sold for x dollars.
 - (a) Write the formula for:
 - i. the Profit W [3]
 - ii. the loss V [3]
 - iii. the percentage profit P [3]
 - (b) An article cost \$40 dollar and is sold for \$50 dollar, use the formulae and find
 - i. the profit [5]
 - ii. the percentage profit [4]
5. An integer x is such that $60 \leq x \leq 70$, Write down a value of x which is
 - (a) a prime number, [2]
 - (b) a multiple of 9, [3]
 - (c) a square number. [3]
6. Complete the last 3 numbers in these patterns?
 - (a) 1, 3, 5, 7, 9, 11 ..., ..., ... [3]
 - (b) 10, 15, 21, 28, 36,..., ..., ... [3]
 - (c) 2, 4, 6, 8, 10, 12 ..., ..., ... [3]
 - (d) 2 3 5 7 11 13 17 19 ..., ..., ... [3]

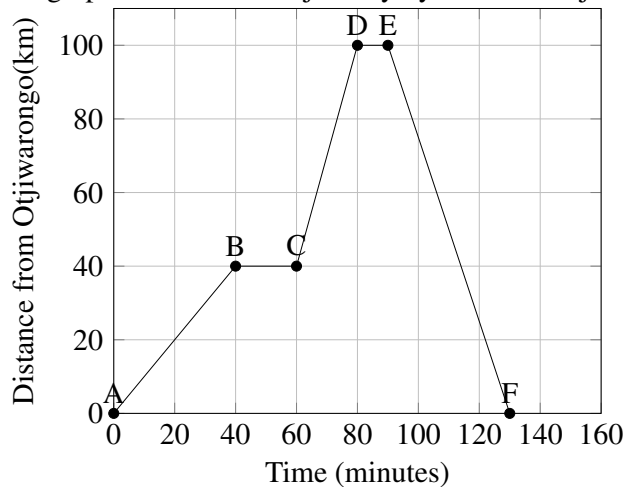
7. List the first 3 cube numbers [3]

8. Leon wants to earn money to buy a video recorder costing N\$1080 by washing cars at N\$12.00 a car.

(a) How many cars must he wash? [5]

(b) How many days would it take if he washes 18 cars each day? [5]

9. The graph shows a return journey by car from Otjiwarongo to Otavi.



(a) How far is it from Otjiwarongo to Otavi? [3]

(b) How far is it from Point **B** to Otavi (point **D-E**)? [3]

(c) At which two places does the car stop? [3]

(d) How long does the car stop in Otavi? [3]

(e) When does the car

i. arrive at Point **B**, [3]

ii. arrive back in Otjiwarongo at point **F** [3]

(f) What is the speed of the car (Hint : $distance = speed \times time$)

i. from Point **A** to Point **B** , [3]

ii. from Point **C** to Point **D** [3]

iii. from Point **E** to Point **F** [3]