Basic Numeracy

BNU1501

Semester 1, 2020

Department of Decision Sciences

Assignment		
01	20 February	823796

Define tomorrow.

UNISA university of south africa

FOR SEMESTER 1 STUDENTS ONLY

ASSIGNMENT 01

Study material: Chapters 1, 2 and 3 in the Study Guide

Unique assignment number: **823796**

FIXED DUE DATE: 20 Feb 2020

Important:

- This is a multiple-choice assignment that must be answered and submitted ONLINE using myUnisa. Go to **Assessment Info** on the BNU1501 module site and follow the steps. Make sure that you complete the submission process.
- Always keep your detailed workings in a file to be able to compare your solutions to the ones that will be published on the BNU1501 module site on myUnisa after the due date. **Also, keep a copy of the options you have chosen, in case of a query.**
- The due date of this assignment is **fixed**. No extension can be granted because the solutions will be posted on the BNU1501 module site shortly after the closing date.

Question 1

Round 10.34791 off to three decimal digits.

[1] 10,347

[2] 10,348

[3] 10,034

[4] 11,348

Question 2

Round 10.99458 off to two decimal digits.

[1] 11,00

[2] 10,00

[3] 10,99

[4] 10,90

Question 3

Round 10.34791 off to one decimal digit.

[1] 11.0

[2] 10.4

[3] 10.3

[4] 10.0

Question 4

Suppose q loaves of bread cost c rands (R). Indicate an expression for the cost (in rands, R) of three loaves of bread

[1] $3\frac{c}{q}$.

[2] $3qc$.

[3] $3\frac{q}{c}$.

[4] $\frac{c}{3q}$.

Question 5

If a certain number x is increased by 7, it will be equal to twice that same number decreased by 5. The correct equation/expression for the above sentence is:

[1] $7x = -5(2x)$

[2] $x - 7 = 2(x + 5)$

[3] $7x = 2x - 5$

[4] $x + 7 = 2x - 5$

Question 6

The correct formula/expression for a number which is five times as big as the number obtained after x has been decreased by three is:

[1] $5(x - 3)$

[2] $5x - 3$

[3] $(x - 3) + 5$

[4] $x - 15$

Question 7

A car mechanic charges a call-out fee of R180 plus R600 per hour of labour. At least how many hours must she work to earn R2 580 on

[1] 5

[2] 3

[3] 4

[4] 6

Question 8

A biscuit manufacturer uses 200g of flour, 50g of sugar and 100g of butter for each packet of biscuits produced. Write an expression for the amount of butter needed to produce x packets of biscuits.

[1] $0.01x$ kg

[2] $0.1x$ kg

[3] $100x$ kg

[4] $\frac{x}{0.01}$ kg

Question 9

Simplify the following expression:

$$12 - 4x^2 - \left(3 + x^2\right)$$

[1] $9 - 3x^2$

[2] $9 - 5x^2$

[3] $15 - 5x^2$

[4] $15 - 3x^2$

Question 10

Solve for x in the following expression:

$$2x - 9 = 3 - x$$

[1] 0

[2] 12

[3] $-2x$

[4] 4

Question 11

Simplify the following expression:

$$\sqrt{16x^{36}y^{16}}$$

[1] $8x^{18}y^8$

[2] $4x^6y^4$

[3] $4x^{18}y^8$

[4] $8x^6y^4$

Question 12

Simplify the following expression:

$$6a^2 - 9ab + 2b^2 - 3(ba - b^2)$$

[1] $6a^2 + 12ab + 5b^2$

[2] $6a^2 + 10ab + 3b^2$

[3] $6a^2 - 10ab + 3b^2$

[4] $6a^2 - 12ab + 5b^2$

Question 13

Change the subject of the formula $c = \frac{x}{a} - b$ to x

[1] $x = ab + ac$

[2] $x = ca + b$

[3] $x = abc$

[4] $x = c + b - a$

Question 14

Simplify the following expression as far as possible

$$2b^2(a - 1) - 8a\left(b^2 + 1\right)$$

[1] $-a - b^2 - 6b^2$

[2] $-6ab^2 - 2b^2 - 8a$

[3] $2ba^2 - 2b^2 - 8b^2a - 8a$

[4] $8a - 2b^2 - 6b^2a$

Question 15

Solve for y in the following expression:

$$3(4y - 2) = 2y + 1$$

[1] $\frac{1}{2}$

[2] $\frac{-7}{12}$

[3] 1

[4] $\frac{7}{10}$

END OF ASSIGNMENT 01 OF SEMESTER 1