

BNU1501

Basic Numeracy

Department of Decision Sciences

Assignment questions, Semester 1, 2020

Assignment: 01

Due date: 20 February 2020

Unique number: 823796

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 to three decimal digits.

- [1] 10,347
- [2] 10,348
- [3] 10,034
- [4] 11,348

Question 2

Round 10,99458 to two decimal digits.

- [1] 11,00
- [2] 10,00
- [3] 10,99
- [4] 10,90

Question 3

Round 10,34791 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 rand (R). Indicate an expression for the cost, in rand, 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 5 less than twice that same number. The correct equation 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 p has been decreased by three is

[1] $5(p - 3)$.

[2] $5p - 3$.

[3] $(p - 3) + 5$.

[4] $p - 15$.

Question 7

The profit of R436 500 of a company is shared between three partners, A, B and C in the ratio of

$$3 : 2 : 4.$$

The amount that partner C receives, is

[1] R145 500.

[2] R97 000.

[3] R194 000.

[4] R109 125.

Question 8

A biscuit manufacturer uses 200 g of flour, 50 g of sugar and 100 g of butter for each packet of biscuits produced. The expression that describes the amount of butter needed (in kg), to produce x packets of biscuits is

[1] $0,01x$ kg.

[2] $0,1x$ kg.

[3] $100x$ kg.

[4] $\frac{x}{0,01}$ kg.

Question 9

Simplifying the expression

$$12 - 4x^2 - (3 + x^2)$$

gives

[1] $9 - 3x^2$.

[2] $9 - 5x^2$.

[3] $15 - 5x^2$.

[4] $15 - 3x^2$.

Question 10

Mr Singh sells his house for R585 000. The total commission is 6,5% of the selling price of which the broker receives three-quarters and the salesperson receives the rest. The amount that the salesperson receives, is

[1] R95 062,50.

[2] R28 518,75.

[3] R38 025,00.

[4] R9 506,25.

Question 11

Simplifying the expression

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

gives

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

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

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

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

Question 12

Simplifying the expression

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

gives

[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

Consider the fractions

$$\frac{3}{5}; \frac{5}{7}; \frac{5}{8}; \frac{9}{14}.$$

When they are ordered from the **greatest** in value to the **least** in value, we get

[1] $\frac{5}{7}; \frac{9}{14}; \frac{5}{8}; \frac{3}{5}.$

[2] $\frac{9}{14}; \frac{5}{7}; \frac{5}{8}; \frac{3}{5}.$

[3] $\frac{3}{5}; \frac{5}{8}; \frac{9}{14}; \frac{5}{7}.$

[4] $\frac{9}{14}; \frac{5}{8}; \frac{5}{7}; \frac{3}{5}.$

Question 14

Simplifying the expression

$$2b^2(a - 1) - 8a(b^2 + 1)$$

as far as possible gives

[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

The expression

$$2\frac{1}{12} \div 1\frac{7}{8}$$

can also be written as

[1] $\frac{12}{25} \times \frac{8}{15}.$

[2] $\frac{2(25) \div 3(15)}{24}.$

[3] $2\frac{1}{12} \times 1\frac{8}{7}.$

[4] $\frac{5}{3} \times \frac{2}{3}.$