

Learning Unit 1: Introduction to Numeracy
Worksheet Memo

Question 1: Multiple Choice

1. The company bank account has a positive balance of R1 175.00. You then buy a computer costing R6 750.00. What will the balance be in the company account after this purchase?

- a. R5 575.00
b. -R 5 575.00
 c. R550
 d. -R2 900

$$+1175 - 6750 = -R5575.00$$

2. What will be the result of simplifying the following? $66 \times 5 + (199 - 7) \div 4^2 - 24$

- a. 318**
 b. -4.50
 c. 227.54
 d. -318

$$66 \times 5 + (192) \div 16 - 24$$

$$330 + 12 - 24 = 318$$

3. You wish to buy a new filter for your car. You phone four different suppliers and obtain a quote from each of them. The average price charged by the four suppliers is R433.00. If the first two suppliers both charge R480.00 for the filter, while the third supplier charges R390.00, how much did the fourth supplier want for the filter?

- a. R716.00
b. R382.00
 c. R328.00
 d. R435.00

$$433 = \frac{480 + 480 + 390 + x}{4}$$

$$433 = \frac{1350 + x}{4}$$

$$433 \times 4 = 1350 + x$$

$$1732 = 1350 + x$$

$$x = 382$$

IQTT5111w

4. What is the following figure rounded to five decimal places? 6.5638467
- a. 6.5639
 - b. 6.56384
 - c. 6.56385
 - d. 6.5637
5. Your department obtains a score of 187 out of 200 on a customer satisfaction survey. What was the percentage score obtained on the survey by the company?
- a. 92.59%
 - b. 96.30%
 - c. 95.30%
 - d. 93.50%

$$\frac{187}{200} \times 100 = 93.5\%$$

Question 2: Averages

Five students write an exam. The average score obtained on the exam by the group of students is 68%. If the first student obtained 66%, while the next three students each obtained a mark of 62%, what was the mark obtained by the fifth student?

$$68 = \frac{66 + 62 + 62 + 62 + x}{5}$$

$$68 = \frac{252 + x}{5}$$

$$68 \times 5 = 252 + x = 340$$

$$340 - 252 = x$$

$$x = 88\%$$

Question 3: Ratios & Profit-Share

George, Jan and Zizi start a new company. They agree to share any profit/loss made by the company in the same ratio as their initial contributions to the start-up capital of the company. George, Jan and Zizi's respective contributions to the start-up capital are R250 000, R150 000, and R100 000, and total profit in the company's first year of operation is R120 000.00.

IQTT5111w

a) What was each person's share of the total profit as a fraction?

$$\text{George's share} = \frac{5}{10}$$

$$\text{Jan's share} = \frac{3}{10}$$

$$\text{Zizi's share} = \frac{2}{10}$$

b) How much did each of the partners receive that year?

$$250\,000 : 150\,000 : 100\,000 \equiv 5 : 3 : 2$$

$$\text{George's share} = \frac{5}{10} \times 120\,000 = R60\,000.00$$

$$\text{Jan's share} = \frac{3}{10} \times 120\,000 = R36\,000.00$$

$$\text{Zizi's share} = \frac{2}{10} \times 120\,000 = R24\,000.00$$