



**AOU**  
الجامعة العربية المفتوحة  
Arab Open University

## Faculty of Business Studies

### BUS101

#### Introduction to Math for Business

**MTA Examination Makeup / Version: C**

**2024-2025 / Fall**

**26-Nov-2024**

**Number of Exam Pages: 3**  
(including this cover sheet)

**Time Allowed: 1.5 hours**

#### Instructions:

Take **FIVE (5)** minutes to read all instructions carefully before attempting to write.

Answer all **FOUR** given questions.

Mobile phones must be in “**SWITCHED OFF**” mode throughout the examination.

This is a **CLOSED** book examination. **NO** documents of any kind are allowed.

You **MUST** answer the questions using only the answer booklets provided

You **MUST** return the examination paper together with your answer booklets.

Do **NOT** write your answers in pencil except graphs/sketches

Students are **NOT** allowed to use any type of dictionary or mobile phones during the examination

Students are allowed to use *non-programmable* calculators only (if needed).

Any form of cheating will **NOT** be tolerated and will subject you to AOU Cheating Policy.

$\frac{2}{3}$  improper  $\frac{5}{4}$  mixed  $2\frac{1}{3}$  mixed  $\frac{7}{3}$  mixed  
 unit = tenth hundredth thousandth  
 = cent

**Question 1** (40 marks, 2.5 each)

Answer the following questions and show your steps of calculation:

$38.6$   
 $\frac{71}{6}$   
 $66$

1. What type is the following fraction?  $12\frac{7}{16}$  mixed R
2. Round  $38.563$  to the nearest cent.  $38.56$
3. Round  $1001.525$  to the nearest ten.  $1000$
4. Convert  $1.006$  to a mixed number.  $1\frac{6}{1000}$
5. Convert  $11\frac{5}{6}$  to an improper fraction.  $\frac{71}{6}$
6. Convert  $6.75\%$  to decimal.  $0.0675$
7. Convert  $6\frac{4}{5}$  to a decimal.  $6.8$
8. Convert  $6\frac{1}{2}\%$  to a fraction.  $\frac{13}{200}$
9. Convert  $\frac{7}{8}$  to a percent.  $87.5\%$
10. Compute  $\frac{3}{8} + \frac{2}{9} + \frac{1}{3}$ .  $\frac{17}{72}$
11. Compute  $3\frac{5}{6} \div 3\frac{1}{2}$ .  $\frac{23}{8} \div \frac{7}{2} = \frac{23}{8} \times \frac{2}{7} = \frac{46}{42}$
12. Compute  $9.015 \times .001$ .  $0.009015$
13. Compute  $128\%$  of  $128$ .  $163.84$
14. Compute  $14\frac{5}{8} - 10\frac{1}{4}$ .  $3\frac{3}{8}$
15. Solve for the Unknown:  $-63B + 92 = -65B + 80$
16. Solve for the Unknown:  $10(\frac{W}{5} - 3) = 8(W + 5) - 60$

**Question 2** (20 marks, 5 each)

a) Hilton Hotels announced a price decrease of  $\frac{1}{10}$  from its \$290 weekend package. What is the new weekend package rate?

Decrease in price =  $290 \times \frac{1}{10} = 29$   
 $290 - 29 = 261$

b) The cost of a hanging flowered plant is \$25.95 for the florist, who purchases 300 of these plants. What is the total cost to the florist?

$25.95 \times 300 = 7785$   
 $L = 52 \rightarrow 52 + 2 = 600$

c) Laura and Zoey sold a total of 600 computers. Laura sold 5 times as many computers as Zoey. How many did each sell?

$100 \rightarrow 2 = 5 \times 100 = 500$   
 $6 \times 100 = 600$

d) The price of a Delta Airlines ticket from New York to Orlando increased to \$450. This is an 8% increase. What was the old fare to the nearest cent?

$100\% \rightarrow 108\%$   
 $450$   
 $8\%$   
 old fare =  $\frac{450}{1.08} = 416.67$   
 New Price =  $416.67 \times 1.08 = 450$

New Price 400 → 15% decrease, old Price → ??  
 100% → 85%  
 $400 \div 85\% = 470$

**Question 3** (20 marks, 10 each)

2 (S)

a) Ben's business buys a television from a wholesaler with a list price of \$600 and a trade discount of 32%. What is the amount of the trade discount and what is the net price of the television?  
 $D = 600 \times 32\% = 192$

$N.P = 600 - 192 = 408$

b) Calculate the End of Discount Period and End of Credit Period.

Date of Invoice	Terms	Date Goods Received	End of Discount Period	End of Credit Period
June 19	3/10, n/30 ROG	July 8	18 July	7 Aug

**Question 4** (20 marks, 10 each)

a) Assume markup is based on selling price. Complete:

Selling Price	% of Markup	Dollar Markup	Cost
\$750	30%	A	B

b) MZ Corporation produces fudge bars. Total fixed cost is \$55,500. Each package of fudge bars sells for \$4.95 with a variable unit cost of \$3.10. What is the breakeven point for MZ Corporation?

END OF EXAM QUESTIONS