DHOFAR UNIVERSITY
FOUNDATION PROGRAM | MATH UNIT
FPM 100 – Math Pre Level
Model Paper Final EXAM
Term (2023-24)

Student Name										
Student ID										**Date:**
Section										**Duration: 1 hour 30 minutes**
Instructor	**Mohammad Mustafa, Mohammad Siddique**									

Instructions:

1) The exam has 3 main questions with a scratch sheet.
2) Please turn off your mobile phone.
3) Use only a blue or black pen.
4) No talking, passing objects, or looking in the direction of another student's paper. Any of these behaviors will be considered cheating.

Dhofar University's Academic Integrity Policy (Policy No. DU-AC-007) is intended to foster hard work, honesty, and responsibility. It strictly prohibits all forms of academic misconduct, including cheating and collusion, plagiarism, and impersonation.
By reading this pledge, I affirm that I have upheld the AIP and that my submitted work is my own and therefore free of any form of cheating.

تهدف سياسة النزاهة الأكاديمية بجامعة ظفار (السياسة رقمDU-AC-007) إلى تعزيز العمل الجاد والأمانة والمسؤولية
و تحظر تمامًا جميع الأشكال التي تخالف النزاهة الأكاديمية ، بما في ذلك الغش والتواطؤ والسرقة الأدبية والإنتحال.

من خلال قراءتي لهذا التعهد أؤكد أنني ملتزم بسياسة النزاهة الأكاديمية و أن عملي هذا هو خاص بي ويخلو من أي شكل من أشكال الغش.

Student's Signature: _____

Marking Grid

Question	Question 1 MCQs (out of 10)	Question 2 (out of 15)	Question 3 (out of 15)	Total / 40 marks
Marks obtained				

Marker's name:		Moderator's name:	
Marker's signature:		Moderator's signature:	
Date:		Date:	

Question 1: Circle the correct answer. **(10 Marks)**

1. Reduce to the lowest term $\frac{27m^2n}{9mn}$

A. $3m$ B. $3mn$ C. $\frac{3m}{n}$ D. $\frac{3n}{m}$

2. Reduce to the lowest term $\frac{5x+15}{5}$

A. $x+15$ B. $x-3$ C. 15 D. $x+3$

3. Reduce to the lowest term $\frac{y^2-4}{y-2}$

A. $2y$ B. $\frac{y}{2}$ C. $y+2$ D. $y-2$

4. Reduce to the lowest term $\frac{x^2+3x+2}{x+1}$

A. $x-3$ B. $x+2$ C. $x+1$ D. $x+3$

5. Which value represents a solution for $4x+2=-14$

A. $x=3$ B. $x=-4$ C. $x=4$ D. *no solution*

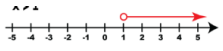
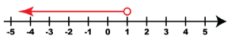
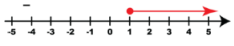
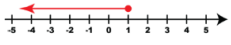
6. Which value represents a solution for $\frac{x}{2}+5=2$

A. $x=6$ B. $x=-6$ C. $x=5$ D. $x=4$

7. Which value represents a solution for $\sqrt{2x}=4$

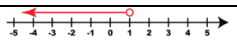
A. $x=16$ B. 8 C. $x=4$ D. $x=2$

8. Graph the solution set of the inequality: $x>1$

A.  B.  C.  D. 

9. Write the interval in inequalty form $(-\infty, 9)$

A. $x>9$ B. $x>-9$ C. $x<9$ D. $x<-9$

10. Which inequality represents the given graph 

A. $x\leq 1$ B. $x\geq -1$ C. $x<1$ D. $x\geq 1$

Question 2: Solve each equation for *x*. **(15 Marks)**

A. $10x + 2 = x + 11$	(3 marks)
B. $\frac{4x}{3} + \frac{x}{2} = 5$	(3 marks)
C. $\sqrt{3x + 4} = 1$	(3 marks)
D. Find Two consecutive numbers whose sum is 61.	(6 marks)

Question 3: Find the solution to the inequality, graph the solution on a number line, and express the solution as an interval **(15 Marks)**

A. $2(x-3) > x+3$	(5 marks)
B. $\frac{x+1}{2} \leq \frac{7}{3}$	(5 marks)
C. Salim had scores of 3, 2, and 4 on the first three exams. What score must she get in her fourth exam, so the average is equal to 3 or better?	(5 marks)

End of Model Paper Final Exam

SCRATCH SHEET

Name: _____

Note:

1. This scratch sheet will not be marked.
2. Do not detach it from the rest of the exam papers.