

Student Name: _____**Class:** _____**Student ID:** _____**Date:** {{DATE}}

Assessment Details

Duration: 2 hours	Total Marks: 100
Topics Covered:	<ul style="list-style-type: none">• Fractions• Decimals• Operations with Fractions and Decimals• Real-World Applications

Instructions to Students:

1. Read all questions carefully before attempting.
2. Show all working out - marks are awarded for method.
3. Calculator use is permitted except where stated otherwise.
4. Write your answers in the spaces provided.
5. If you need more space, use the additional pages at the end.
6. Time management is crucial - allocate approximately 1 minute per mark.

Question 1

[2 marks]

What is the definition of a fraction?

A) A whole number divided by another whole number

B) A decimal number divided by another decimal number

C) A part of a whole

D) A whole number multiplied by another whole number

Question 2

[2 marks]

What is the difference between a fraction and a decimal?

A) A fraction is a whole number, while a decimal is a part of a whole

B) A fraction is a part of a whole, while a decimal is a whole number

C) A fraction is a ratio of two whole numbers, while a decimal is a part of a whole

D) A fraction is a whole number, while a decimal is a ratio of two whole numbers

Question 3

[2 marks]

What is the result of adding $\frac{1}{2}$ and $\frac{1}{4}$?

A) $\frac{3}{4}$

B) $\frac{2}{4}$

C) $\frac{1}{4}$

D) $\frac{3}{2}$

Question 4

[2 marks]

What is the result of multiplying 2.5 and 3.8?

A) 9.5

B) 10.5

C) 11.5

D) 12.5

Question 5**[2 marks]**

A recipe calls for $\frac{3}{4}$ cup of sugar. If you want to make half the recipe, how much sugar do you need?

A) $\frac{1}{4}$ cup

B) $\frac{1}{2}$ cup

C) $\frac{3}{8}$ cup

D) $\frac{1}{8}$ cup

Section B: Short Answer Questions [40 marks]

Question 6

[8 marks]

What are equivalent fractions? Provide an example.

Question 7

[8 marks]

Simplify the expression: $2\frac{3}{4} + 1\frac{1}{2}$

Question 8

[8 marks]

Convert the decimal 0.75 to a fraction.

Question 9

[8 marks]

A water tank can hold $\frac{3}{4}$ of a gallon of water. If $\frac{1}{4}$ of the tank is already filled, how much more water can be added?

Question 10

[8 marks]

A person invests \$1000 at an interest rate of 2.5% per annum. How much will they have after 5 years?

Question 11

[20 marks]

Design a recipe that requires the use of fractions and decimals in the ingredients and instructions.



Question 12

[20 marks]

Analyze and interpret the data presented in the following table:

Item	Price
A	\$2.50
B	\$1.25
C	\$3.75

Create a visual representation (graph, chart, or table) to display the data.



Conclusion

Reflect on what you have learned about fractions and decimals. How can you apply this knowledge to real-world problems?

