

**Student Name:** \_\_\_\_\_**Class:** \_\_\_\_\_**Student ID:** \_\_\_\_\_**Date:** \_\_\_\_\_

## Assessment Details

<b>Duration:</b> 45 minutes	<b>Total Marks:</b> 100
<b>Topics Covered:</b>	<ul style="list-style-type: none"><li>• Equivalent Fractions</li><li>• Adding and Subtracting Fractions</li><li>• Converting between Fractions and Decimals</li><li>• Real-World Applications</li></ul>

## 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.

Section A: Multiple Choice [20 marks]

Question 1

[2 marks]

Which of the following fractions is equivalent to  $\frac{1}{2}$ ?

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

B)  $\frac{3}{6}$

C)  $\frac{1}{3}$

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

Question 2

[2 marks]

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

A)  $\frac{1}{2}$

B)  $\frac{1}{8}$

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

D)  $\frac{2}{8}$

Question 3

[2 marks]

Which of the following decimals is equal to  $\frac{3}{4}$ ?

A) 0.25

B) 0.5

C) 0.75

D) 0.9

Question 4

[2 marks]

What is the result of subtracting  $\frac{1}{6}$  from  $\frac{1}{3}$ ?

A)  $\frac{1}{6}$

B)  $\frac{1}{12}$

C)  $\frac{2}{6}$

D)  $\frac{2}{12}$

Question 5

[2 marks]

Which of the following fractions has a denominator of 12?

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

B)  $\frac{1}{6}$

C)  $\frac{2}{12}$

D)  $\frac{3}{8}$

**Question 6**

**[8 marks]**

Explain the concept of equivalent fractions and provide an example.

**Question 7**

**[6 marks]**

Simplify the fraction  $\frac{6}{8}$ .

**Question 8**

**[6 marks]**

Convert the decimal 0.5 to a fraction.

**Question 9**

**[10 marks]**

Tom has  $\frac{1}{4}$  of a pizza left over from last night. His friend, Alex, has  $\frac{1}{4}$  of a pizza left over as well. If they combine their pizzas, what fraction of a pizza do they have in total?

**Question 10**

**[10 marks]**

A bookshelf is  $2\frac{3}{4}$  meters tall. If a box is  $\frac{1}{4}$  meter tall, how many boxes can fit on the bookshelf?

**Question 11**

**[10 marks]**

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

Section D: Additional Questions [20 marks]

Question 12

[5 marks]

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

Question 13

[5 marks]

What is the result of subtracting  $\frac{1}{3}$  from  $\frac{2}{3}$ ?

Question 14

[5 marks]

What is the result of multiplying  $\frac{1}{2}$  and  $\frac{3}{4}$ ?

Question 15

[5 marks]

What is the result of dividing  $\frac{1}{2}$  by  $\frac{2}{3}$ ?



## Conclusion

This assessment is designed to evaluate students' understanding of fractions and decimals. The questions and tasks are designed to align with the learning objectives and to provide a comprehensive evaluation of students' knowledge and skills.

## Additional Resources

For additional support, students can use the following resources:

- Fraction charts and diagrams
- Decimal conversion tables
- Online resources and tutorials