

Grade 5 Mathematics

Fractions

Complete Worksheet Pack

Equivalent fractions • Comparing • Operations • Mixed numbers • Reasoning

Worksheet 1 – Equivalent Fractions & Simplifying

Grade 5 Mathematics

A. Complete the Equivalent Fractions

1. $\frac{3}{5} = \frac{?}{20}$

2. $\frac{7}{8} = \frac{21}{?}$

3. $\frac{4}{9} = \frac{?}{36}$

4. $\frac{5}{6} = \frac{25}{?}$

5. $\frac{12}{18} = \frac{?}{3}$

6. $\frac{15}{25} = \frac{3}{?}$

B. Simplify & Reason

1. Simplify $\frac{18}{24}$.

2. Simplify $\frac{35}{49}$.

3. Simplify $\frac{42}{56}$.

4. Are $\frac{14}{21}$ and $\frac{20}{30}$ equivalent? Explain.

5. Write two different fractions equivalent to $\frac{7}{10}$.

Worksheet 2 – Comparing & Ordering Fractions

Grade 5 Mathematics

A. Compare

1. Which is greater: $\frac{5}{8}$ or $\frac{3}{4}$?

2. Which is greater: $\frac{7}{10}$ or $\frac{2}{3}$?

3. Compare: $\frac{11}{12}$ ____ $\frac{9}{10}$.

4. Compare: $\frac{5}{6}$ ____ $\frac{13}{15}$.

5. Compare: $\frac{7}{9}$ ____ $\frac{14}{18}$.

B. Order & Explain

1. Order from smallest to largest: $\frac{1}{2}$, $\frac{3}{8}$, $\frac{5}{6}$, $\frac{2}{3}$.

2. Order from greatest to smallest: $\frac{7}{10}$, $\frac{3}{5}$, $\frac{11}{15}$, $\frac{5}{6}$.

3. Which is closer to 1: $\frac{7}{8}$ or $\frac{5}{6}$? Explain.

Worksheet 3 – Adding & Subtracting Fractions

Grade 5 Mathematics

A. Calculate

1. $\frac{3}{8} + \frac{2}{8} =$

2. $\frac{7}{10} - \frac{3}{10} =$

3. $\frac{2}{3} + \frac{1}{6} =$

4. $\frac{5}{6} - \frac{1}{4} =$

5. $\frac{3}{5} + \frac{7}{10} =$

6. $\frac{7}{8} - \frac{1}{3} =$

B. Find the Missing Fraction

1. $? + \frac{3}{8} = \frac{7}{8}$

2. $\frac{5}{6} - ? = \frac{1}{3}$

3. $? + \frac{2}{5} = 1$

4. $\frac{7}{10} - ? = \frac{1}{5}$

Worksheet 4 – Mixed Numbers & Fractions of Quantities

Grade 5 Mathematics

A. Convert

1. Convert $2\frac{3}{5}$ to an improper fraction.

2. Convert $\frac{17}{4}$ to a mixed number.

3. Convert $4\frac{7}{8}$ to an improper fraction.

4. Convert $\frac{29}{6}$ to a mixed number.

B. Fractions of Quantities

1. Find $\frac{3}{5}$ of 45.

2. Find $\frac{7}{8}$ of 64.

3. Find $\frac{2}{3}$ of 72.

4. Find $\frac{5}{6}$ of 90.

5. A class has 40 students. $\frac{3}{8}$ of them bring lunch from home. How many students is that?

Worksheet 5 – Fractions in Real Life

Grade 5 Mathematics

A. Solve the Problems

1. A water tank is $\frac{3}{4}$ full. If its capacity is 800 litres, how much water is in the tank?

2. Riya reads $\frac{2}{5}$ of a 250-page book on Monday and $\frac{1}{4}$ of the book on Tuesday. What fraction of the book has she read altogether?

3. A recipe needs $\frac{3}{4}$ cup of flour. You want to make 2 batches. How much flour is needed?

4. A 12 km trail is $\frac{5}{6}$ complete. How many kilometres have been completed?

5. A farmer has 240 trees. $\frac{3}{8}$ are mango trees and $\frac{1}{4}$ are orange trees. How many trees are neither mango nor orange?

B. Challenge

1. A student says $\frac{2}{3} + \frac{3}{4} = \frac{5}{7}$ because they added the numerators and denominators. Explain the mistake and find the correct answer.

Worksheet 6 – Fraction Reasoning Challenge

Grade 5 Mathematics

A. Think Carefully

1. A fraction is greater than $\frac{1}{2}$ but less than $\frac{3}{4}$. Give three possible fractions.

2. Find a fraction equivalent to $\frac{18}{24}$ with a denominator of 8.

3. Which is greater: $\frac{5}{8} + \frac{1}{4}$ or $\frac{3}{4}$? Explain.

4. A number is $2\frac{1}{2}$. Write it as an improper fraction and as a decimal.

5. Find two fractions with a sum of 1 and different denominators.

B. True or False? Explain

1. $\frac{4}{6}$ and $\frac{2}{3}$ are equivalent.

2. $\frac{5}{8}$ is greater than $\frac{3}{5}$.

3. $\frac{7}{10} + \frac{2}{10} = \frac{9}{20}$.

4. Every proper fraction is less than 1.

Answer Key – Worksheet 1

Grade 5 Mathematics

1. $\frac{12}{20}$
2. $\frac{21}{24}$
3. $\frac{16}{36}$
4. $\frac{25}{30}$
5. $\frac{2}{3}$
6. $\frac{3}{5}$
7. $\frac{3}{4}$
8. $\frac{5}{7}$
9. $\frac{3}{4}$
10. Yes; both equal $\frac{2}{3}$.
11. Examples: $\frac{14}{20}$ and $\frac{21}{30}$.

Answer Key – Worksheet 2

Grade 5 Mathematics

1. $\frac{3}{4}$ is greater.
2. $\frac{7}{10}$ is greater.
3. $\frac{11}{12} > \frac{9}{10}$.
4. $\frac{5}{6} > \frac{13}{15}$.
5. They are equal.
6. $\frac{3}{8}$, $\frac{1}{2}$, $\frac{2}{3}$, $\frac{5}{6}$.
7. $\frac{5}{6}$, $\frac{11}{15}$, $\frac{7}{10}$, $\frac{3}{5}$.
8. $\frac{7}{8}$ is closer to 1.

Answer Key – Worksheet 3

Grade 5 Mathematics

1. $\frac{5}{8}$

2. $\frac{2}{5}$

3. $\frac{5}{6}$

4. $\frac{7}{12}$

5. $\frac{13}{10} = 1 \frac{3}{10}$

6. $\frac{13}{24}$

7. $\frac{1}{2}$

8. $\frac{1}{2}$

9. $\frac{3}{5}$

10. $\frac{1}{2}$

Answer Key – Worksheet 4

Grade 5 Mathematics

1. $13/5 = 2 \frac{3}{5}$.

2. $4 \frac{1}{4}$.

3. $39/8$.

4. $4 \frac{5}{6}$.

5. 27.

6. 56.

7. 48.

8. 75.

9. 15 students.

Answer Key – Worksheet 5

Grade 5 Mathematics

1. 600 litres.
2. $\frac{13}{20}$ of the book; 162.5 pages if calculated as a quantity, but the fraction is the key answer.
3. $1\frac{1}{2}$ cups.
4. 10 km.
5. 90 trees are neither mango nor orange.
6. The denominators cannot simply be added. $\frac{2}{3} = \frac{8}{12}$ and $\frac{3}{4} = \frac{9}{12}$, so the correct answer is $\frac{17}{12} = 1\frac{5}{12}$.

Answer Key – Worksheet 6

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1. Answers vary; examples: $\frac{5}{8}$, $\frac{2}{3}$, $\frac{7}{10}$.
2. $\frac{6}{8}$.
3. $\frac{5}{8} + \frac{1}{4} = \frac{7}{8}$, so $\frac{5}{8} + \frac{1}{4}$ is greater than $\frac{3}{4}$.
4. $2\frac{1}{2} = \frac{5}{2} = 2.5$.
5. Examples: $\frac{1}{3} + \frac{2}{3} = 1$; $\frac{3}{8} + \frac{5}{8} = 1$.
6. True.
7. True.
8. False; $\frac{7}{10} + \frac{2}{10} = \frac{9}{10}$.
9. True.