

GRADE 6

FRACTIONS

Complete Worksheet Pack

What this pack covers

Equivalent fractions • Simplifying • Comparing & ordering • Addition & subtraction •
Multiplication & division • Fractions of quantities • Real-life problems • Reasoning
challenges

6 practice worksheets + 6 separate answer-key pages

Worksheet 1: Equivalent Fractions, Simplifying & Fraction Sense

Show your working. Simplify answers where appropriate.

1. Simplify **18/24** to its lowest terms.
2. Simplify **35/49** to its lowest terms.
3. Write an equivalent fraction to **5/8** with denominator 40.
4. Write an equivalent fraction to **7/9** with denominator 45.
5. Simplify **42/56**. Show the common factor you divide by.
6. A fraction bar is divided into 5 equal parts, with 3 parts shaded. What fraction is represented?
7. Complete: **2/3** = ____/18.
8. Explain briefly why **15/20** and **3/4** are equivalent.

Challenge yourself: explain your method for at least one question.

Answer Key 1

Worksheet 1: Equivalent Fractions, Simplifying & Fraction Sense — Answers

1. $\frac{3}{4}$
2. $\frac{5}{7}$
3. $\frac{25}{40}$
4. $\frac{35}{45}$
5. $\frac{3}{4}$; divide by 14
6. $\frac{3}{5}$
7. 12
8. $\frac{15}{20} \div 5 = \frac{3}{4}$ (or equivalent explanation).

Teacher note: Accept equivalent forms where mathematically correct.

Worksheet 2: Comparing & Ordering Fractions

Show your working. Simplify answers where appropriate.

1. Compare: $\frac{5}{8}$ ____ $\frac{3}{4}$.
2. Compare: $\frac{7}{12}$ ____ $\frac{5}{8}$.
3. Order from least to greatest: $\frac{2}{3}$, $\frac{5}{9}$, $\frac{7}{12}$.
4. Compare: $\frac{11}{15}$ ____ $\frac{7}{10}$.
5. Give one fraction between $\frac{2}{5}$ and $\frac{1}{2}$.
6. Which is closer to 1: $\frac{11}{12}$ or $\frac{7}{8}$? Explain using distance from 1.
7. Order from greatest to least: $\frac{5}{6}$, $\frac{13}{18}$, $\frac{3}{4}$.
8. Without converting to decimals, decide whether $\frac{9}{14}$ is greater or less than $\frac{2}{3}$.

Challenge yourself: explain your method for at least one question.

Answer Key 2

Worksheet 2: Comparing & Ordering Fractions — Answers

1. $\frac{5}{8} < \frac{3}{4}$
2. $\frac{7}{12} < \frac{5}{8}$
3. $\frac{5}{9}$, $\frac{7}{12}$, $\frac{2}{3}$
4. $\frac{11}{15} > \frac{7}{10}$
5. Example: $\frac{9}{20}$
6. $\frac{11}{12}$; distances are $\frac{1}{12}$ and $\frac{1}{8}$
7. $\frac{5}{6}$, $\frac{3}{4}$, $\frac{13}{18}$
8. $\frac{9}{14} < \frac{2}{3}$ (cross-products: $27 < 28$).

Teacher note: Accept equivalent forms where mathematically correct.

Worksheet 3: Adding & Subtracting Fractions

Show your working. Simplify answers where appropriate.

1. Calculate: $\frac{3}{8} + \frac{1}{4}$.
2. Calculate: $\frac{5}{6} - \frac{1}{4}$.
3. Calculate: $2\frac{1}{3} + 1\frac{5}{6}$.
4. Calculate: $3\frac{3}{4} - 1\frac{5}{8}$.
5. Calculate: $\frac{7}{10} + \frac{5}{12}$.
6. Calculate: $\frac{5}{6} - \frac{7}{18}$.
7. Find x: $x + \frac{2}{5} = \frac{11}{15}$.
8. A ribbon is $3\frac{1}{2}$ m long. A piece of $1\frac{3}{4}$ m is cut off. How much ribbon remains?

Answer Key 3

Worksheet 3: Adding & Subtracting Fractions — Answers

1. $\frac{5}{8}$
2. $\frac{7}{12}$
3. $4\frac{1}{6}$
4. $2\frac{1}{8}$
5. $\frac{59}{60}$
6. $\frac{4}{9}$
7. $\frac{1}{3}$
8. $1\frac{3}{4}$ m

Teacher note: Accept equivalent forms where mathematically correct.

Worksheet 4: Multiplying & Dividing Fractions

Show your working. Simplify answers where appropriate.

1. Calculate: $\frac{3}{5} \times \frac{10}{9}$.
2. Calculate: $\frac{7}{8} \times \frac{4}{7}$.
3. Calculate: $2 \frac{1}{4} \times \frac{2}{3}$.
4. Calculate: $\frac{5}{6} \div \frac{10}{9}$.
5. Calculate: $\frac{3}{4} \div \frac{1}{8}$.
6. Calculate: $2 \frac{2}{3} \div \frac{4}{9}$.
7. Find x: $x \times \frac{3}{5} = \frac{9}{10}$.
8. Find $\frac{4}{5}$ of 35.

Answer Key 4

Worksheet 4: Multiplying & Dividing Fractions — Answers

1. $\frac{2}{3}$
2. $\frac{1}{2}$
3. $1\frac{1}{2}$
4. $\frac{3}{4}$
5. 6
6. 6
7. $\frac{3}{2} = 1\frac{1}{2}$
8. 28

Teacher note: Accept equivalent forms where mathematically correct.

Worksheet 5: Fractions of Quantities & Real-Life Problems

Show your working. Simplify answers where appropriate.

1. Find $\frac{3}{4}$ of 48.
2. Find $\frac{2}{3}$ of 90.
3. A recipe uses $\frac{3}{4}$ cup of flour for one batch. How much flour is needed for $2\frac{1}{2}$ batches?
4. A tank is $\frac{5}{6}$ full. Then $\frac{1}{3}$ of the tank's total capacity is used. What fraction of the tank's capacity remains?
5. A book has 240 pages. A student reads $\frac{5}{8}$ of it. How many pages are left?
6. A $2\frac{1}{2}$ km route is marked out. A runner completes $\frac{3}{5}$ of the route. How far did the runner travel?
7. There are 32 students. $\frac{3}{8}$ are absent. How many students are present?
8. A school has 72 notebooks. $\frac{5}{6}$ are distributed. How many notebooks remain?

Answer Key 5

Worksheet 5: Fractions of Quantities & Real-Life Problems — Answers

1. 36
2. 60
3. $1\frac{7}{8}$ cups
4. $\frac{1}{2}$
5. 90 pages
6. $1\frac{1}{2}$ km
7. 20 students
8. 12 notebooks

Teacher note: Accept equivalent forms where mathematically correct.

Worksheet 6: Fraction Reasoning Challenge

Show your working. Simplify answers where appropriate.

1. Calculate and simplify: $\frac{5}{8} + \frac{7}{12}$.
2. Give one fraction strictly between $\frac{7}{10}$ and $\frac{4}{5}$.
3. If $\frac{2}{3}$ of a number is 40, what is the number?
4. Find: $\frac{3}{4}$ of $\frac{2}{3}$.
5. Calculate: $\frac{5}{6} \div \frac{10}{9}$.
6. Find the fraction left after $\frac{2}{5}$ and $\frac{1}{4}$ of a whole are used.
7. Give three different fractions whose sum is exactly 1.
8. A 12 L container is $\frac{3}{4}$ full. Then 2 L is poured out. What fraction of the container is full now?

Answer Key 6

Worksheet 6: Fraction Reasoning Challenge — Answers

1. $1 \frac{5}{24}$
2. Example: $\frac{3}{4}$
3. 60
4. $\frac{1}{2}$
5. $\frac{3}{4}$
6. $\frac{7}{20}$
7. Example: $\frac{1}{2} + \frac{1}{3} + \frac{1}{6} = 1$
8. $\frac{7}{12}$ ($9 \text{ L} - 2 \text{ L} = 7 \text{ L}$; $\frac{7}{12}$ of 12 L).

Teacher note: Accept equivalent forms where mathematically correct.