# GRADE 7

Fractions & Mixed Numbers

Complete Fractions Practice Pack

6 Worksheets

Equivalent fractions • Comparing & ordering

Operations • Mixed numbers • Real-life problems • Reasoning

Anupama's Maths Corner

Making Maths Fun & Meaningful

## Worksheet 1 — Equivalent Fractions & Simplifying

Instructions: Simplify each fraction where possible. For equivalent fractions, show the multiplication or division

used.

1. Simplify 24/36.
2. Simplify 45/60.
3. Write three fractions equivalent to 5/8.
4. Complete: 7/9 = ____/45.
5. Complete: 11/15 = 44/____.
6. Are 18/24 and 27/36 equivalent? Show how you know.
7. Write each fraction in simplest form, then arrange from least to greatest: 42/56, 35/49, 24/32.
8. Find the missing numerator: ____/28 = 5/7.

## Answer Key — Equivalent Fractions & Simplifying

Answer key — use to check completed work.

1. 2/3.

2. 3/4.

3. Examples: 10/16, 15/24, 20/32.

4. 35.

5. 60.

6. Yes; both simplify to 3/4.

7. 42/56 = 3/4; 35/49 = 5/7; 24/32 = 3/4. Order: 35/49, then 42/56 = 24/32.

8. 20.

## Worksheet 2 — Comparing & Ordering Fractions

Instructions: Compare fractions using equivalent fractions or cross-multiplication. Show your reasoning where

asked.

1. Compare: 5/8 ____ 3/4.
2. Compare: 7/12 ____ 5/8.
3. Arrange from least to greatest: 2/3, 5/6, 3/5, 7/10.
4. Arrange from greatest to least: 11/12, 4/5, 7/8, 5/6.
5. Which is closer to 1: 7/8 or 9/10? Explain.
6. Find a fraction between 2/5 and 1/2.
7. Which is greater: 13/18 or 7/10? Explain.
8. Order from least to greatest: 1 1/4, 5/4, 1 2/5, 6/5.

## Answer Key — Comparing & Ordering Fractions

Answer key — use to check completed work.

1. 5/8 < 3/4.

2. 7/12 < 5/8.

3. 3/5, 2/3, 7/10, 5/6.

4. 11/12, 7/8, 5/6, 4/5.

5. 9/10; it is 1/10 from 1, whereas 7/8 is 1/8 from 1.

6. Example: 9/20.

7. 13/18; cross-products: 13 × 10 = 130 and 7 × 18 = 126, so 13/18 is greater.

8. 1 1/4 = 5/4, then 6/5, then 1 2/5.

## Worksheet 3 — Adding & Subtracting Fractions

Instructions: Find a common denominator before adding or subtracting. Simplify each final answer and show

your working.

1. 3/8 + 5/12

2. 7/10 − 1/4

3. 5/6 + 7/9

4. 11/12 − 5/18

5. 2 1/3 + 1 3/4

6. 5 1/2 − 2 2/3

7. A recipe needs 3/4 cup of sugar and 2/3 cup of flour. How much is needed altogether?

8. A ribbon is 5 1/4 m long. If 2 3/8 m is used, how much remains?

## Answer Key — Adding & Subtracting Fractions

Answer key — use to check completed work.

1. 19/24.

2. 9/20.

3. 29/18 = 1 11/18.

4. 23/36.

5. 4 1/12.

6. 2 5/6.

7. 17/12 = 1 5/12 cups.

8. 2 7/8 m.

## Worksheet 4 — Multiplying & Dividing Fractions

Instructions: For multiplication, multiply numerators and denominators. For division, multiply by the reciprocal.

Simplify each answer.

1. 3/5 × 10/9

2. 7/8 × 12/21

3. 5/6 × 9/10

4. 4/7 ÷ 2/3

5. 5/8 ÷ 15/16

6. 2 1/2 × 3/5

7. 3 3/4 ÷ 1 1/2

8. A rectangular garden is 3 1/2 m long and 2 2/3 m wide. Find its area.

## Answer Key — Multiplying & Dividing Fractions

Answer key — use to check completed work.

1. 2/3.

2. 1/2.

3. 3/4.

4. 6/7.

5. 2/3.

6. 1 1/2.

7. 2 1/2.

8. 28/3 m² = 9 1/3 m².

## Worksheet 5 — Mixed Numbers & Real-Life Problems

Instructions: Convert between improper fractions and mixed numbers where needed. Show your calculations

and include units in word-problem answers.

1. Convert 17/4 to a mixed number.

2. Convert 4 2/5 to an improper fraction.

3. A runner completes 2 3/4 km in the morning and 3 1/2 km in the evening. How far altogether?

4. A tank contains 8 1/2 L. If 3 3/4 L is used, how much remains?

5. A baker has 6 2/3 kg of flour and uses 1 5/6 kg. How much remains?

6. Each small box holds 3/4 kg. How many boxes can be filled from 6 kg?

7. A class spends 2/5 of an hour reading and 3/10 of an hour discussing. What fraction of an

hour is that altogether?

8. A road is 12 1/2 km long. A cyclist completes 7/8 of the road. How far has the cyclist travelled?

## Answer Key — Mixed Numbers & Real-Life Problems

Answer key — use to check completed work.

1. 4 1/4.

2. 22/5.

3. 6 1/4 km.

4. 4 3/4 L.

5. 4 5/6 kg.

6. 8 boxes.

7. 7/10 hour.

8. 10 15/16 km.

## Worksheet 6 — Fractions Challenge

Instructions: Show clear working for every question. Simplify final answers and explain your reasoning in words

where requested.

1. Find x: x/12 = 5/8.

2. Find x: 3/5 + x = 7/6.

3. A fraction is equivalent to 18/30 and has denominator 45. Find its numerator.

4. A number is multiplied by 3/4 and the result is 5 1/4. Find the original number.

5. Which is greater: 2/3 of 18 or 3/5 of 20? By how much?

6. A recipe uses 2 1/4 cups of flour for 3 batches. How much flour is needed for 8 batches at the same rate?

7. Find a fraction in simplest form that is greater than 3/5 but less than 2/3.

8. A student solves 7/8 − 2/3 as 5/5. Explain the error and give the correct answer.

## Answer Key — Fractions Challenge

Answer key — use to check completed work.

1. x = 7.5 = 15/2.

2. x = 17/30.

3. 27.

4. 7.

5. Both are equal: 2/3 of 18 = 12 and 3/5 of 20 = 12. Difference = 0.

6. 6 cups.

7. Example: 19/30.

8. The denominators cannot be subtracted directly. Use denominator 24: 21/24 − 16/24 = 5/24.