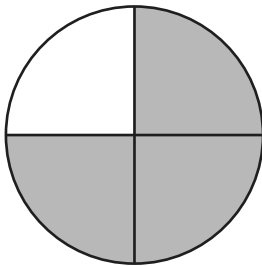


Fractions Worksheets

Grades 4–5 • With Answer Key

Pictures first, symbols second — the way fractions should be learned.

What is a fraction?



$$\frac{3}{4}$$

3 of the 4 parts are shaded



$$\frac{2}{4}$$

2 of the 4 parts are shaded

A fraction is a part of a whole. The whole is cut into EQUAL parts, and the fraction tells us how many of those parts we are talking about.

The TOP number is the numerator — it counts the parts you have.

The BOTTOM number is the denominator — it counts the equal parts in the whole.

How to use this pack

1. Work page by page — each page builds one skill, in order.
2. Do this page together first. Then let the child try alone.
3. Use a pencil, and shade lightly — mistakes are easy to rub out.
4. Check answers with the key on the last two pages — after trying, not before. The trying is where the learning happens.
5. Short sessions win: one page a day beats a long sitting.

Print as many copies as your class needs. This pack is free.

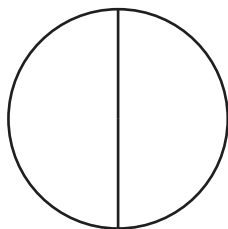
Name: _____

Class: _____

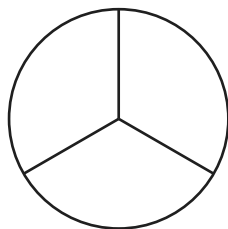
Date: _____

Page 2 — Shade it, write it

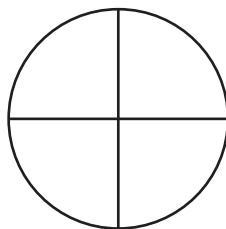
Part A — Shade the fraction written under each shape



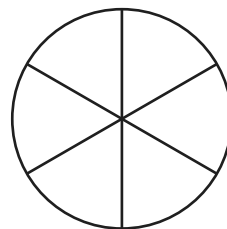
$$\frac{1}{2}$$



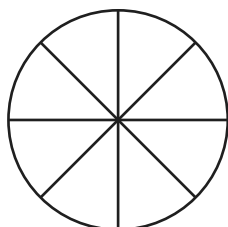
$$\frac{2}{3}$$



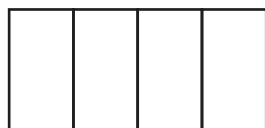
$$\frac{3}{4}$$



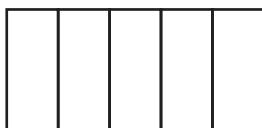
$$\frac{5}{6}$$



$$\frac{3}{8}$$



$$\frac{1}{4}$$

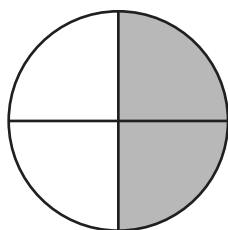


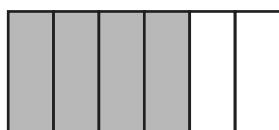
$$\frac{3}{5}$$

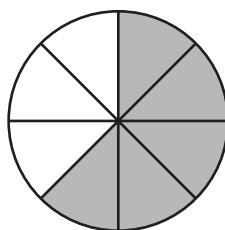


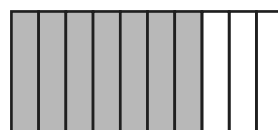
$$\frac{5}{8}$$

Part B — These shapes are already shaded. Write the fraction for each one.









Name: _____

Class: _____

Date: _____

Page 3 — Equivalent fractions

Equivalent fractions look different but mean the same amount: $\frac{1}{2} = \frac{2}{4} = \frac{3}{6}$.

To make one, multiply the top and the bottom by the SAME number.

Fill in the missing number

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

3. $\frac{2}{3} = \frac{\quad}{9}$

5. $\frac{1}{4} = \frac{\quad}{8}$

7. $\frac{5}{6} = \frac{\quad}{12}$

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

4. $\frac{3}{4} = \frac{\quad}{12}$

6. $\frac{2}{5} = \frac{\quad}{10}$

8. $\frac{3}{5} = \frac{\quad}{6}$

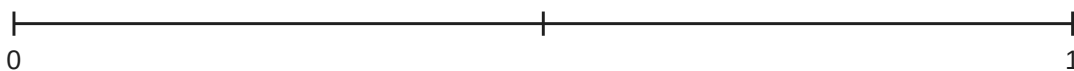
Write TWO equivalent fractions of your own

9. $\frac{1}{2} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

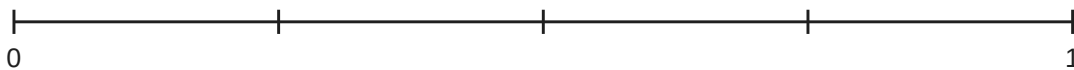
10. $\frac{3}{4} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

Number lines — mark each fraction with an X on its line

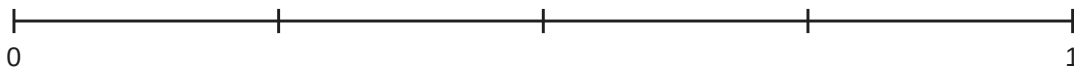
$\frac{1}{2}$



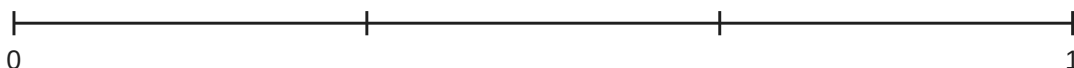
$\frac{1}{4}$



$\frac{3}{4}$



$\frac{1}{3}$



$\frac{2}{3}$



Name: _____

Class: _____

Date: _____

Page 4 — Comparing fractions

Write < (smaller), > (bigger) or = (equal) in each box.

Trick: if the bottom numbers match, compare the tops. If the tops match, the fraction with the SMALLER bottom number is bigger — the parts are larger.

1. $\frac{3}{8} \square \frac{5}{8}$

2. $\frac{2}{3} \square \frac{2}{5}$

3. $\frac{1}{2} \square \frac{3}{6}$

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

5. $\frac{4}{5} \square \frac{4}{7}$

6. $\frac{5}{6} \square \frac{2}{6}$

7. $\frac{3}{4} \square \frac{5}{8}$

8. $\frac{1}{3} \square \frac{2}{6}$

9. $\frac{7}{10} \square \frac{3}{10}$

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

Now put each set in order — smallest first, largest last

1. $\frac{5}{6} \cdot \frac{1}{6} \cdot \frac{3}{6}$

Order: _____ < _____ < _____

2. $\frac{1}{2} \cdot \frac{1}{5} \cdot \frac{1}{3}$

Order: _____ < _____ < _____

3. $\frac{7}{8} \cdot \frac{3}{8} \cdot \frac{5}{8}$

Order: _____ < _____ < _____

Name: _____

Class: _____

Date: _____

Page 5 — Add and subtract (same denominator)

When the bottom numbers are the same, only the TOP numbers join in.

The bottom number NEVER changes: $2/5 + 1/5 = 3/5$, not $3/10$.

Add or take away

1. $\frac{2}{5} + \frac{1}{5} = \underline{\hspace{2cm}}$

2. $\frac{3}{8} + \frac{4}{8} = \underline{\hspace{2cm}}$

3. $\frac{5}{6} - \frac{2}{6} = \underline{\hspace{2cm}}$

4. $\frac{1}{4} + \frac{2}{4} = \underline{\hspace{2cm}}$

5. $\frac{7}{9} - \frac{3}{9} = \underline{\hspace{2cm}}$

6. $\frac{4}{7} + \frac{2}{7} = \underline{\hspace{2cm}}$

7. $\frac{5}{10} + \frac{3}{10} = \underline{\hspace{2cm}}$

8. $\frac{6}{8} - \frac{1}{8} = \underline{\hspace{2cm}}$

9. $\frac{3}{5} + \frac{3}{5} = \underline{\hspace{2cm}}$

10. $\frac{9}{12} - \frac{4}{12} = \underline{\hspace{2cm}}$

Mixed review — watch the answers carefully

11. $\frac{2}{3} + \frac{1}{3} = \underline{\hspace{2cm}}$

12. $\frac{7}{8} - \frac{7}{8} = \underline{\hspace{2cm}}$

Name: _____

Class: _____

Date: _____

Page 6 — Simplify and convert

Simplifying means dividing the top and bottom by the same number until they cannot be divided any further: $4/8 \rightarrow 2/4 \rightarrow 1/2$.

Write each fraction in its lowest terms

1. $\frac{4}{8} = \underline{\hspace{2cm}}$

2. $\frac{6}{9} = \underline{\hspace{2cm}}$

3. $\frac{10}{15} = \underline{\hspace{2cm}}$

4. $\frac{8}{10} = \underline{\hspace{2cm}}$

5. $\frac{3}{6} = \underline{\hspace{2cm}}$

6. $\frac{12}{16} = \underline{\hspace{2cm}}$

7. $\frac{15}{25} = \underline{\hspace{2cm}}$

8. $\frac{9}{27} = \underline{\hspace{2cm}}$

9. $\frac{6}{15} = \underline{\hspace{2cm}}$

10. $\frac{10}{24} = \underline{\hspace{2cm}}$

Improper fractions $\rightarrow$ mixed numbers

1. $\frac{7}{4} = \underline{\hspace{2cm}}$

2. $\frac{9}{5} = \underline{\hspace{2cm}}$

3. $\frac{11}{3} = \underline{\hspace{2cm}}$

Mixed numbers $\rightarrow$ improper fractions

1. $2\frac{1}{3} = \underline{\hspace{2cm}}$

2. $1\frac{5}{8} = \underline{\hspace{2cm}}$

3. $3\frac{2}{5} = \underline{\hspace{2cm}}$

Answer Key

Check after trying. A wrong answer you fix yourself teaches more than a right one copied.

Page 2, Part A — Shade it

1. Shade 1 of 2 parts ($\frac{1}{2}$)
2. Shade 2 of 3 parts ($\frac{2}{3}$)
3. Shade 3 of 4 parts ($\frac{3}{4}$)
4. Shade 5 of 6 parts ($\frac{5}{6}$)
5. Shade 3 of 8 parts ($\frac{3}{8}$)
6. Shade 1 of 4 parts ($\frac{1}{4}$)
7. Shade 3 of 5 parts ($\frac{3}{5}$)
8. Shade 5 of 8 parts ($\frac{5}{8}$)

Page 2, Part B — Write the fraction

1. $\frac{2}{4}$ (= $\frac{1}{2}$ in lowest terms)
2. $\frac{4}{6}$ (= $\frac{2}{3}$ in lowest terms)
3. $\frac{5}{8}$
4. $\frac{7}{10}$

Page 3 — Equivalent fractions

1. $\frac{1}{2} = \frac{2}{4}$
2. $\frac{1}{3} = \frac{2}{6}$
3. $\frac{2}{3} = \frac{6}{9}$
4. $\frac{3}{4} = \frac{9}{12}$
5. $\frac{1}{4} = \frac{2}{8}$
6. $\frac{2}{5} = \frac{4}{10}$
7. $\frac{5}{6} = \frac{10}{12}$
8. $\frac{3}{5} = \frac{6}{10}$
9. $\frac{1}{2} = \frac{2}{4}$ and $\frac{3}{6}$ (any two correct answers)
10. $\frac{3}{4} = \frac{6}{8}$ and $\frac{9}{12}$ (any two correct answers)

Page 3 — Number lines

1. $\frac{1}{2}$ sits at 1 of 2 equal steps from 0
2. $\frac{1}{4}$ sits at 1 of 4 equal steps from 0
3. $\frac{3}{4}$ sits at 3 of 4 equal steps from 0
4. $\frac{1}{3}$ sits at 1 of 3 equal steps from 0
5. $\frac{2}{3}$ sits at 2 of 3 equal steps from 0

Answer Key (continued)

Page 4 — Comparing fractions

1. $\frac{3}{8} < \frac{5}{8}$
2. $\frac{2}{3} > \frac{2}{5}$
3. $\frac{1}{2} = \frac{3}{6}$
4. $\frac{1}{4} < \frac{1}{2}$
5. $\frac{4}{5} > \frac{4}{7}$
6. $\frac{5}{6} > \frac{2}{6}$
7. $\frac{3}{4} > \frac{5}{8}$
8. $\frac{1}{3} = \frac{2}{6}$
9. $\frac{7}{10} > \frac{3}{10}$
10. $\frac{2}{4} = \frac{1}{2}$

Page 4 — In order, smallest first

1. $\frac{1}{6} < \frac{3}{6} < \frac{5}{6}$
2. $\frac{1}{5} < \frac{1}{3} < \frac{1}{2}$
3. $\frac{3}{8} < \frac{5}{8} < \frac{7}{8}$

Page 5 — Add and subtract (questions 11–12 are the mixed review)

1. $\frac{3}{5}$
2. $\frac{7}{8}$
3. $\frac{1}{2}$ (from $\frac{3}{6}$, simplified)
4. $\frac{3}{4}$
5. $\frac{4}{9}$
6. $\frac{6}{7}$
7. $\frac{4}{5}$ (from $\frac{8}{10}$, simplified)
8. $\frac{5}{8}$
9. $1 \frac{1}{5}$
10. $\frac{5}{12}$
11. 1 (from $\frac{3}{3}$, simplified)
12. 0

Page 6 — Simplify (lowest terms)

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

Page 6 — Convert

1. $1 \frac{3}{4}$
2. $1 \frac{4}{5}$
3. $3 \frac{2}{3}$
4. $\frac{7}{3}$
5. $\frac{13}{8}$
6. $\frac{17}{5}$