Mathematics - Week 3

Fractions

Areas covered this week:

- To recognise equivalent fractions
- To add fractions with the same denominator
- To subtract fractions with the same denominator

Remember to also practise your Times Tables ☺

Key Information – What you need to know ☺

What are equivalent fractions and simplifying fractions?

When **two fractions are equivalent**, this means they are **the same in terms of shape and size**, but are **expressed using different numbers.**

For example, these fractions are exactly the same, but because the larger shape is split into a different number of segments in each case, the fraction is expressed in a different way:

Adding + Subtracting Fractions – Same Denominators

$$\frac{1}{4} + \frac{1}{4} = \frac{2}{4}$$

Subtract the numerators
Keep the same denominator

$$\frac{5}{8} - \frac{2}{8} = \frac{3}{8}$$

Subtracting fractions

Equivalent Fractions

These fractions are equivalent. The rectangles are the same. The amount shaded is equivalent.

$\frac{3}{12}$ = $\frac{1}{4}$

Write the shaded fraction for each rectangle. Cut each section out. Match the rectangles with the equivalent amount shaded and stick each equivalent set together in your book.

$\frac{\quad}{6}$

$\frac{\quad}{12}$

$\frac{\quad}{6}$

$\frac{\quad}{5}$

$\frac{\quad}{10}$

$\frac{\quad}{8}$

$\frac{\quad}{4}$

$\frac{\quad}{18}$

$\frac{\quad}{3}$

$\frac{\quad}{4}$

$\frac{\quad}{9}$

$\frac{\quad}{24}$

Equivalent Fractions

These fractions are equivalent. The rectangles are the same. The amount shaded is equivalent.

$\frac{3}{12}$ = $\frac{1}{4}$

Shade the second shape to be equivalent to the first and write the equivalent fractions.

$\frac{1}{4}$ = ___

$\frac{}{3}$ = ___

$\frac{}{10}$ = ___

___ = ___

___ = ___

Equivalent Fractions

These fractions are equivalent. The rectangles are the same. The amount shaded is equivalent.

$\frac{4}{6}$ = $\frac{2}{3}$

Write the fraction of each shape that is shaded and draw a line to match equivalent fraction.

_ _

_ _

_ _

_ _

_ _

Adding Fractions

Name..... Date.....

Colour in the correct number of boxes and write the answer to the fraction sums. Example:

a) $\frac{1}{4} + \frac{3}{4} = \frac{4}{4}$

Red Blue

Red	Blue	Blue	Blue

b) $\frac{1}{4} + \frac{2}{4} = \frac{\quad}{4}$

Red Blue

c) $\frac{2}{5} + \frac{1}{5} = \frac{\quad}{5}$

Red Blue

d) $\frac{1}{3} + \frac{2}{3} = \frac{\quad}{3}$

Red Blue

Use the fraction numberline to find the answer to the fraction sums.

e) $\frac{1}{5} + \frac{3}{5} =$

f) $\frac{1}{5} + \frac{4}{5} =$

$\frac{0}{5}$ $\frac{1}{5}$ $\frac{2}{5}$ $\frac{3}{5}$ $\frac{4}{5}$ $\frac{5}{5}$

g) $\frac{2}{6} + \frac{3}{6} =$

h) $\frac{1}{6} + \frac{4}{6} =$

$\frac{0}{6}$ $\frac{1}{6}$ $\frac{2}{6}$ $\frac{3}{6}$ $\frac{4}{6}$ $\frac{5}{6}$ $\frac{6}{6}$

Adding Fractions

Name..... Date.....

Work these sums out:

1) $\frac{3}{7} + \frac{2}{7} =$

2) $\frac{2}{5} + \frac{2}{5} =$

3) $\frac{1}{5} + \frac{3}{5} =$

4) $\frac{2}{6} + \frac{3}{6} =$

5) $\frac{4}{8} + \frac{2}{8} =$

6) $\frac{4}{7} + \frac{3}{7} =$

7) $\frac{6}{9} + \frac{2}{9} =$

8) $\frac{5}{8} + \frac{2}{8} =$

9) $\frac{7}{10} + \frac{2}{10} =$

10) $\frac{5}{12} + \frac{6}{12} =$

11) $\frac{4}{11} + \frac{5}{11} =$

12) $\frac{5}{15} + \frac{8}{15} =$

Adding Fractions

Name..... Date.....

Work these sums out:

1) $\frac{5}{9} + \frac{4}{9} =$

2) $\frac{5}{8} + \frac{2}{8} =$

3) $\frac{3}{9} + \frac{5}{9} =$

4) $\frac{5}{12} + \frac{6}{12} =$

5) $\frac{8}{14} + \frac{5}{14} =$

6) $\frac{7}{12} + \frac{4}{12} =$

7) $\frac{9}{15} + \frac{4}{15} =$

8) $\frac{7}{16} + \frac{8}{16} =$

9) $\frac{3}{15} + \frac{5}{15} + \frac{4}{15} =$

10) $\frac{3}{11} + \frac{4}{11} + \frac{2}{11} =$

11) $\frac{3}{16} + \frac{7}{16} + \frac{5}{16} =$

Adding Fractions

Name..... Date.....

Colour in the correct number of boxes and write the answer to the fraction sums. Example:

a) $\frac{1}{4} + \frac{3}{4} = \frac{4}{4}$

Red Blue

Red	Blue	Blue	Blue

b) $\frac{1}{4} + \frac{2}{4} = \frac{\quad}{4}$

Red Blue

c) $\frac{2}{5} + \frac{1}{5} = \frac{\quad}{5}$

Red Blue

d) $\frac{1}{3} + \frac{2}{3} = \frac{\quad}{3}$

Red Blue

Use the fraction numberline to find the answer to the fraction sums.

e) $\frac{1}{5} + \frac{3}{5} =$

f) $\frac{1}{5} + \frac{4}{5} =$

$\frac{0}{5}$ $\frac{1}{5}$ $\frac{2}{5}$ $\frac{3}{5}$ $\frac{4}{5}$ $\frac{5}{5}$

g) $\frac{2}{6} + \frac{3}{6} =$

h) $\frac{1}{6} + \frac{4}{6} =$

$\frac{0}{6}$ $\frac{1}{6}$ $\frac{2}{6}$ $\frac{3}{6}$ $\frac{4}{6}$ $\frac{5}{6}$ $\frac{6}{6}$

Adding and subtracting fractions with the same denominator

Colour the correct number of sections in each circle, and then colour more or erase some depending on the calculation. The denominator stays the same – you just have more or less sections depending on the calculation!

E.g.

$\frac{3}{8} + \frac{2}{8} =$ $\frac{5}{8}$

E.g.

$\frac{7}{8} - \frac{5}{8} =$ $\frac{2}{8}$

1.

$\frac{2}{6} + \frac{2}{6} =$ ____

2.

$\frac{4}{5} - \frac{3}{5} =$ ____

3.

$\frac{1}{8} + \frac{4}{8} =$ ____

4.

$\frac{5}{6} - \frac{2}{6} =$ ____

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5.

$\frac{2}{7} + \frac{3}{7} =$ ____

6.

$\frac{8}{8} - \frac{7}{8} =$ ____

7.

$\frac{2}{12} + \frac{8}{12} =$ ____

8.

$\frac{7}{9} - \frac{5}{9} =$ ____

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Adding and subtracting fractions with the same denominator

Answers

1.

$\frac{4}{6}$

2.

$\frac{1}{5}$

3.

$\frac{5}{8}$

4.

$\frac{3}{6}$

5.

$\frac{5}{7}$

6.

$\frac{1}{8}$

7.

$\frac{10}{12}$

8.

$\frac{2}{9}$

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Printable Times Tables Quiz Generator

Name: _____

Number of Questions: **40**

Testing: **2×**, **3×**, **4×**, **5×**, **6×**, **7×**, **8×**, **9×**, **10×**, **11×**, **12×** (with **inverse**)

3 × 8 = _____	8 × 1 = _____	24 ÷ 3 = _____
7 ÷ 7 = _____	2 × 11 = _____	55 ÷ 5 = _____
5 × 10 = _____	4 × 7 = _____	7 × 6 = _____
77 ÷ 7 = _____	2 × 3 = _____	12 × 9 = _____
27 ÷ 3 = _____	7 × 10 = _____	4 × 2 = _____
7 × 12 = _____	4 × 3 = _____	10 × 3 = _____
8 × 4 = _____	3 × 2 = _____	96 ÷ 8 = _____
8 × 10 = _____	7 × 11 = _____	8 × 2 = _____
20 ÷ 10 = _____	9 × 1 = _____	10 ÷ 10 = _____
9 × 7 = _____	7 × 9 = _____	12 × 11 = _____
120 ÷ 12 = _____	32 ÷ 8 = _____	9 × 11 = _____
2 × 10 = _____	6 × 10 = _____	8 ÷ 4 = _____
12 ÷ 2 = _____	132 ÷ 11 = _____	2 × 7 = _____
5 × 6 = _____		

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Printable Times Tables Quiz Generator

Name: _____

Number of Questions: **40**

Testing: **2×, 3×, 4×, 5×, 6×, 7×, 8×, 9×, 10×, 11×, 12×**

6 × 10 = _____	9 × 2 = _____	9 × 6 = _____
6 × 11 = _____	12 × 3 = _____	11 × 10 = _____
11 × 2 = _____	1 × 2 = _____	11 × 3 = _____
10 × 4 = _____	5 × 2 = _____	12 × 10 = _____
4 × 1 = _____	11 × 8 = _____	10 × 8 = _____
2 × 9 = _____	7 × 7 = _____	3 × 3 = _____
9 × 9 = _____	12 × 7 = _____	10 × 10 = _____
7 × 10 = _____	11 × 6 = _____	10 × 9 = _____
4 × 7 = _____	10 × 5 = _____	6 × 2 = _____
12 × 10 = _____	9 × 3 = _____	9 × 6 = _____
11 × 9 = _____	8 × 5 = _____	7 × 6 = _____
4 × 2 = _____	5 × 9 = _____	9 × 4 = _____
9 × 11 = _____	5 × 8 = _____	10 × 12 = _____
11 × 7 = _____		

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