Mixed numbers and improper fractions

ANSWERS

1

(a) Write $2\frac{3}{5}$ as an improper fraction.

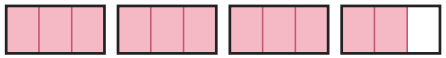


2 × 5 + 3 = 13

$\frac{13}{5}$

Answer $\frac{13}{5}$

(b) Write $\frac{11}{3}$ as a mixed number.



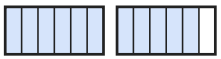
11 ÷ 3 = 3 r 2

$3\frac{2}{3}$

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

2

(a) Write $1\frac{5}{6}$ as an improper fraction.



1 × 6 + 5 = 11

$\frac{11}{6}$

Answer $\frac{11}{6}$

(b) Write $\frac{7}{2}$ as a mixed number.



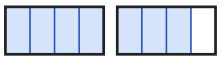
7 ÷ 2 = 3 r 1

$3\frac{1}{2}$

Answer $3\frac{1}{2}$

3

(a) Write $1\frac{3}{4}$ as an improper fraction.



1 × 4 + 3 = 7

$\frac{7}{4}$

Answer $\frac{7}{4}$

(b) Write $\frac{13}{6}$ as a mixed number.



13 ÷ 6 = 2 r 1

$2\frac{1}{6}$

Answer $2\frac{1}{6}$

4

(a) Write $4\frac{2}{3}$ as an improper fraction.

4 × 3 + 2 = 14

$\frac{14}{3}$

Answer $\frac{14}{3}$

(b) Write $\frac{23}{5}$ as a mixed number.

23 ÷ 5 = 4 r 3

$4\frac{3}{5}$

Answer $4\frac{3}{5}$

5

Write each as a mixed number in its simplest form.

(a) $\frac{22}{8}$ (b) $\frac{15}{6}$

22 ÷ 8 = 2 r 6, 15 ÷ 6 = 2 r 3

(a) $2\frac{6}{8} = 2\frac{3}{4}$

(b) $2\frac{3}{6} = 2\frac{1}{2}$

6

Zara says $5\frac{1}{3} = \frac{9}{3}$ because 5 + 1 + 3 = 9.

Use a check to show that Zara is wrong.

Then write $5\frac{1}{3}$ as an improper fraction.

9 ÷ 3 = 3, less than 5. 5 × 3 + 1 = 16

Answer $\frac{16}{3}$

7

A café cuts every cake into 6 equal slices.
On Saturday it sells 27 slices.
How many cakes is this?
Give your answer as a mixed number in its simplest form.

27 ÷ 6 = 4 r 3, $4\frac{3}{6} = 4\frac{1}{2}$

Answer $4\frac{1}{2}$ cakes

8

Write these in order, smallest first.

$\frac{9}{4}$ $1\frac{7}{8}$ $\frac{5}{2}$

$\frac{9}{4} = 2\frac{1}{4}$, $\frac{5}{2} = 2\frac{1}{2}$

Answer $1\frac{7}{8}$, $\frac{9}{4}$, $\frac{5}{2}$

Mixed numbers and improper fractions *further practice*

ANSWERS

9

(a) Write $5\frac{7}{8}$ as an improper fraction.

(b) Write $\frac{38}{7}$ as a mixed number.

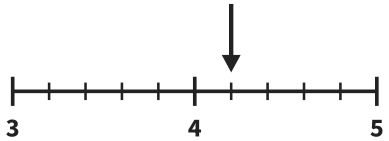
$5 \times 8 + 7 = 47$, $38 \div 7 = 5$ r 3

(a) $\frac{47}{8}$

(b) $5\frac{3}{7}$

10

Write the number the arrow points to as a mixed number and as an improper fraction.



each step is $\frac{1}{5}$

mixed number $4\frac{1}{5}$

improper fraction $\frac{21}{5}$

11

A jug holds $2\frac{3}{4}$ litres of juice.

A glass holds $\frac{1}{4}$ of a litre.

How many glasses can be filled from the full jug?

$2 \times 4 + 3 = 11$ quarters

Answer 11 glasses

12

Four laps of a running track make 1 mile. Jo runs 9 laps. How many miles does she run? Give your answer as a mixed number.

$\frac{9}{4}$, $9 \div 4 = 2$ r 1

Answer $2\frac{1}{4}$ miles

13

Find the missing numbers.

(a) $3\frac{\square}{5} = \frac{18}{5}$

(b) $\square\frac{1}{4} = \frac{25}{4}$

$3 \times 5 = 15$, $18 - 15 = 3$,
$25 - 1 = 24$, $24 \div 4 = 6$

(a) 3

(b) 6

14

Which is bigger, $\frac{17}{3}$ or $5\frac{1}{2}$?

Show how you know.

$\frac{17}{3} = 5\frac{2}{3}$, $\frac{2}{3}$ is more than $\frac{1}{2}$

Answer $\frac{17}{3}$

15

Write $3\frac{2}{3}$ as an improper fraction with a denominator of 9.

$3 \times 3 + 2 = 11$, $\frac{11}{3} = \frac{33}{9}$

Answer $\frac{33}{9}$

16

Sam says $\frac{26}{4}$ and $6\frac{1}{2}$ are the same amount. Is he right?

Explain how you know.

$26 \div 4 = 6$ r 2, $6\frac{2}{4} = 6\frac{1}{2}$

Answer Yes