

# Year 5: Improper fractions and mixed numbers: answers

Year 5 - Equivalent Fractions and Mixed Numbers - Lesson 6.4

**Answers.** Final answers to the worksheet questions. Full step-by-step solutions for every question are free at [websink.site/ks2-sats/maths/year-5/ch06-fractions/improper-fractions-and-mixed-numbers/](https://websink.site/ks2-sats/maths/year-5/ch06-fractions/improper-fractions-and-mixed-numbers/)

## Exercise 6D Improper fractions and mixed numbers

Non-calculator

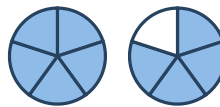
**1** Look at each picture. Write the improper fraction and the mixed number.

(a)



**Answer:**  $\frac{7}{4} = 1 \frac{3}{4}$

(b)



**Answer:**  $\frac{9}{5} = 1 \frac{4}{5}$

(c)



**Answer:**  $\frac{11}{3} = 3 \frac{2}{3}$

**2** Write each improper fraction as a mixed number (or a whole number).

(a)  $\frac{7}{4}$

**Answer:**  $1 \frac{3}{4}$

(b)  $\frac{9}{5}$

**Answer:**  $1 \frac{4}{5}$

(c)  $\frac{13}{3}$

**Answer:**  $4 \frac{1}{3}$

(d)  $\frac{17}{6}$

**Answer:**  $2 \frac{5}{6}$

(e)  $\frac{22}{8}$

**Answer:**  $2 \frac{3}{4}$

(f)  $\frac{12}{4}$

**Answer:** 3

**3** Write each mixed number as an improper fraction.

(a)  $1\frac{2}{3}$

**Answer:**  $\frac{5}{3}$

(b)  $2\frac{3}{4}$

**Answer:**  $\frac{11}{4}$

(c)  $3\frac{1}{5}$

**Answer:**  $\frac{16}{5}$

(d)  $4\frac{5}{8}$

**Answer:**  $\frac{37}{8}$

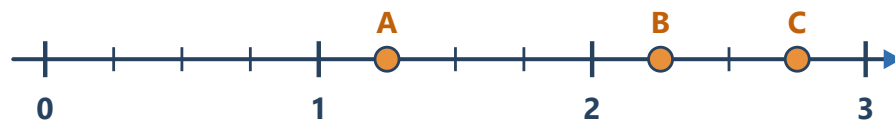
(e)  $2\frac{7}{10}$

**Answer:**  $\frac{27}{10}$

(f)  $5\frac{1}{2}$

**Answer:**  $\frac{11}{2}$

**4** Write the number shown by each letter as a mixed number.



(a) Letter A

**Answer:**  $1\frac{1}{4} = \frac{5}{4}$

(b) Letter B

**Answer:**  $2\frac{1}{4} = \frac{9}{4}$

(c) Letter C

**Answer:**  $2\frac{3}{4} = \frac{11}{4}$

**5** Write the number in each box on the number line as a mixed number.



(a) Box 1

**Answer:**  $1\frac{2}{5} = \frac{7}{5}$

(b) Box 2

**Answer:**  $2\frac{1}{5} = \frac{11}{5}$

(c) Box 3

**Answer:**  $2\frac{4}{5} = \frac{14}{5}$

6 Find each missing number.

(a)  $\frac{17}{5} = 3\frac{?}{5}$

**Answer:** 2

(b)  $\frac{23}{4} = ?\frac{3}{4}$

**Answer:** 5

(c)  $2\frac{3}{8} = \frac{?}{8}$

**Answer:** 19

(d)  $\frac{?}{6} = 4\frac{1}{6}$

**Answer:** 25

7 Work out each addition. Write each answer as a mixed number in its simplest form.

(a)  $\frac{3}{5} + \frac{4}{5}$

**Answer:**  $1\frac{2}{5}$

(b)  $\frac{3}{4} + \frac{3}{4}$

**Answer:**  $1\frac{1}{2}$

(c)  $\frac{5}{6} + \frac{5}{6}$

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

(d)  $\frac{7}{10} + \frac{9}{10}$

**Answer:**  $1\frac{3}{5}$

8 Write < or > in each box.

(a)  $\frac{17}{5}$  ?  $3\frac{1}{5}$

Answer:  $\frac{17}{5} > 3\frac{1}{5}$

(b)  $2\frac{3}{4}$  ?  $\frac{10}{4}$

Answer:  $2\frac{3}{4} > \frac{10}{4}$

(c)  $\frac{5}{3}$  ?  $1\frac{1}{3}$

Answer:  $\frac{5}{3} > 1\frac{1}{3}$

9 Write each division as a fraction. If it is more than 1, write it as a mixed number too.

(a)  $3 \div 4$

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

(b)  $5 \div 8$

Answer:  $\frac{5}{8}$

(c)  $7 \div 4$

Answer:  $1\frac{3}{4}$

(d)  $11 \div 3$

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

10 Mei shares 3 cakes equally between 4 friends. How much cake does each friend get?



Answer:  $\frac{3}{4}$  of a cake

11 Nine pancakes are shared equally between 4 children. How many pancakes does each child get? Write your answer as a mixed number.

Answer:  $2\frac{1}{4}$  pancakes

12 5 litres of water are poured equally into 3 jugs. How much water is in each jug?

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

13 A baker cuts  $4\frac{1}{2}$  pies into halves. How many halves are there?

Answer: 9 halves

14 Which is the odd one out? Explain how you know.  $\frac{7}{4}$   $1\frac{3}{4}$   $\frac{14}{8}$   $1\frac{7}{8}$

**Answer:**  $1\frac{7}{8}$

- 15** Noah says, " $3\frac{2}{5}$  as an improper fraction is  $\frac{6}{5}$ ." What has Noah done wrong? What is the correct answer?

**Answer:** He multiplied  $3 \times 2$ . Correct:  $\frac{17}{5}$

- 16** Always, sometimes or never?

- (a) An improper fraction is greater than 1.

**Answer:** Sometimes

- (b) A mixed number is greater than 1.

**Answer:** Always

- 17** Challenge! I am an improper fraction with a denominator of 6. I am between 2 and 3. My numerator is a multiple of 5. What fraction am I? Write me as an improper fraction and as a mixed number.

**Answer:**  $\frac{15}{6} = 2\frac{3}{6} = 2\frac{1}{2}$