

Fractions, Decimals and Percentages

Practice Booklet **Answers**

1. Put these fractions in order of size, starting with the smallest.

$$\frac{1}{6} \quad \frac{7}{12} \quad \frac{2}{3} \quad \frac{3}{4}$$

2. The numbers in this sequence increase by the same amount each time.

Write the missing numbers.

$$\boxed{\frac{4}{7}} \quad 1 \quad 1\frac{3}{7} \quad 1\frac{12}{14} \quad \boxed{2\frac{2}{7}}$$

3. In each box, circle the number that is greater.

$$\boxed{1\frac{3}{5}} \quad 1.55$$

$$1\frac{2}{3} \quad \boxed{1.8}$$

$$1\frac{9}{100} \quad \boxed{1.9}$$

$$\boxed{1\frac{7}{10}} \quad 1.67$$

4. Write the missing fraction in this calculation.

$$\frac{1}{5} + \frac{1}{3} + \boxed{\frac{7}{15}} = 1$$

5. Write the missing numbers in these equivalent fractions.

$$\frac{4}{5} = \frac{12}{\boxed{15}} = \frac{\boxed{72}}{90}$$

6. Circle the improper fraction that is equivalent to $4\frac{7}{9}$

$$\frac{40}{9} \quad \frac{41}{9} \quad \frac{42}{9} \quad \boxed{\frac{43}{9}} \quad \frac{44}{9}$$

7. Tick the calculation that is the best estimate.

$$\input type="checkbox"/> 4 - 1 + 2 \quad \input type="checkbox"/> 5 - 2 + 2$$

$$\input checked="" type="checkbox"/> 5 - 1 + 2 \quad \input type="checkbox"/> 4 - 1 + 1$$

8. I spent £1.40 on a drink and £1.70 on a sandwich. I have three fifths of my money left. How much money did I have to start with?

$$\mathbf{£1.40 + £1.70 = £3.10}$$

$$\mathbf{£3.10 = \frac{2}{5} \text{ of money}}$$

$$\mathbf{\frac{1}{5} \text{ of money} = £1.55}$$

$$\mathbf{\frac{5}{5} \text{ of money} = £7.75}$$

9. Yesterday, I read $\frac{3}{7}$ of my book. Today, I read the remaining 152 pages to finish the book. How many pages are there in my book?

$$\mathbf{152 \text{ pages} = \frac{4}{7} \text{ of the pages.}}$$

$$\mathbf{\frac{1}{7} \text{ of the pages} = 152 \div 4 = 38 \text{ pages}}$$

$$\mathbf{\frac{7}{7} \text{ of the pages} = 38 \times 7 = 266 \text{ pages}}$$

10. One fruit smoothie contains $\frac{2}{3}$ of a carton of orange juice. I make 7 smoothies. Calculate, as a mixed number, how much orange juice I use altogether.

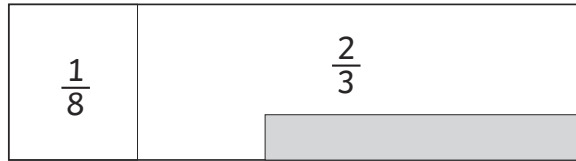
$$\mathbf{\frac{2}{3} \times 7 = \frac{14}{3} \quad 4\frac{2}{3} \text{ cartons}}$$

11. In this circle, $\frac{1}{4}$ and $\frac{3}{16}$ are shaded. What fraction of the whole circle is not shaded?

$$\mathbf{\frac{1}{4} + \frac{3}{16} = \frac{7}{16}}$$

$$\mathbf{\frac{16}{16} - \frac{7}{16} = \frac{9}{16}}$$

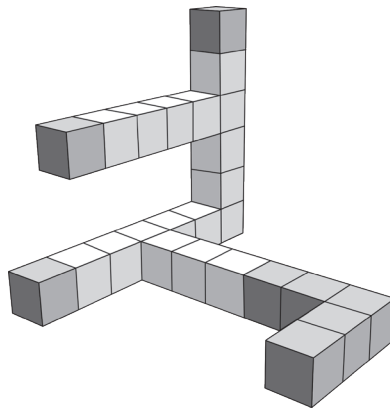
12. What fraction of this diagram is shaded?



$$\frac{1}{8} + \frac{2}{3} = \frac{19}{24}$$

$$\frac{24}{24} - \frac{19}{24} = \frac{5}{24}$$

13. I make a model out of 25 cubes.
What percentage of the cubes in the model are blue?



$$\frac{8}{25} = \frac{32}{100}$$

$$\frac{32}{100} = 0.32$$

$$0.32 \times 100 = 32\%$$

14. I have £380. I spend 18% of my money on a new bike.
How much money do I spend on my new bike?

$$1\% \text{ of } \pounds 380 = \pounds 3.80$$

$$8\% \text{ of } \pounds 380 = \pounds 30.40$$

$$10\% \text{ of } \pounds 380 = \pounds 38$$

$$\pounds 38 + \pounds 30.40 = \pounds 68.40$$