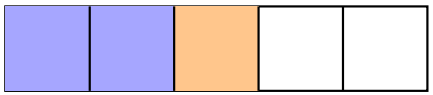
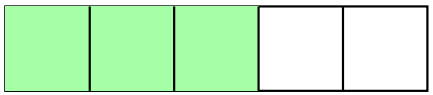
Fractions: Adding & Subtracting

Starter 10

1. Fully simplify: $\frac{12}{16}$
2. Which is larger: $\frac{3}{7}$ or $\frac{3}{9}$?

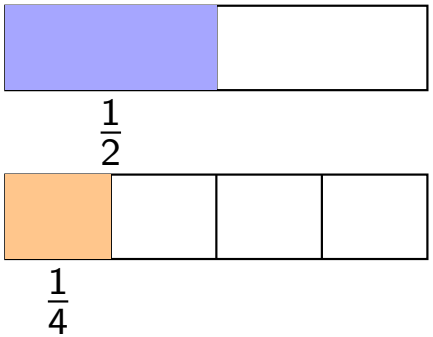


3. Convert $\frac{11}{4}$ to a mixed number.



4. Complete the addition represented by the bars to the left:

$$\frac{?}{5} + \frac{?}{5} = \frac{3}{?}$$



5. Calculate:

$$\frac{1}{7} + \frac{3}{7} \qquad \frac{5}{9} + \frac{2}{9}$$

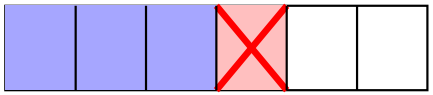
6. To add $\frac{1}{2} + \frac{1}{4}$, what must you do first? Can you draw a picture to demonstrate?

7. Calculate: $\frac{1}{2} + \frac{1}{4}$

8. Calculate: $\frac{1}{3} + \frac{1}{4}$

Starter 11

1. Write 3 fractions equivalent to $\frac{2}{3}$.

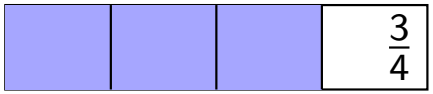


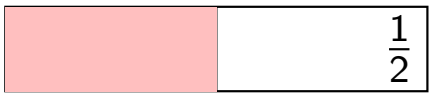
2. Order smallest to largest: $\frac{1}{8}$, $\frac{1}{2}$, $\frac{1}{12}$

3. Convert $2\frac{3}{7}$ to an improper fraction.

4. Complete the subtraction represented by the bars to the left:

$$\frac{4}{6} - \frac{?}{6} = \frac{?}{6} = \frac{1}{?}$$





5. Calculate:

$$\frac{7}{10} - \frac{3}{10} \qquad \frac{8}{9} - \frac{5}{9}$$

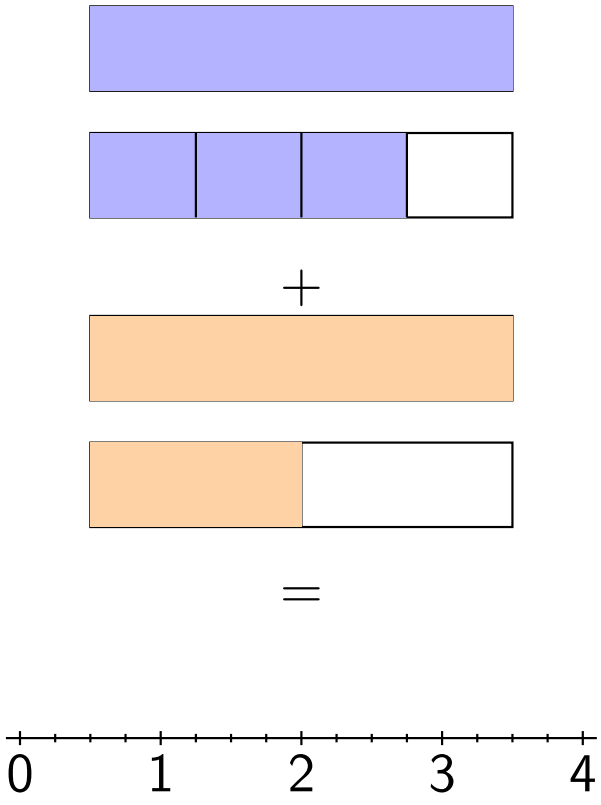
6. Use the bars to work out $\frac{3}{4} - \frac{1}{2}$.

7. Calculate: $\frac{5}{6} - \frac{1}{4}$

8. Calculate: $\frac{7}{8} - \frac{2}{3}$

9. Order smallest to largest: $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{12}$

Starter 12



1. $\frac{2}{5} + \frac{1}{5}$

2. $\frac{3}{4} - \frac{1}{2}$

3. Simplify: $\frac{36}{48}$

4. Fill in the blanks using the diagram:

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

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

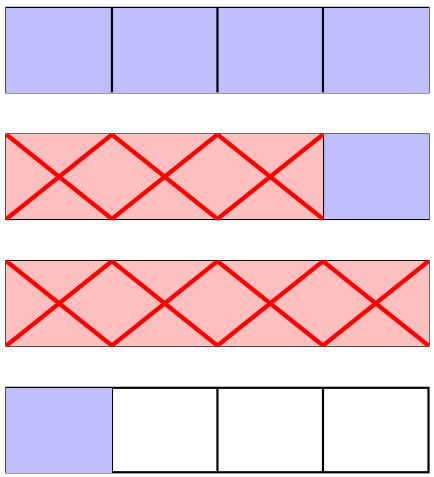
6. $3\frac{1}{4} + 1\frac{1}{2}$

7. Mark $1\frac{3}{4}$ and $3\frac{1}{4}$ on the number line. What is the difference? How else could you work this out?

8. Calculate: $2\frac{2}{3} + 1\frac{3}{4}$

9. Calculate $1\frac{3}{4} - 3\frac{1}{4}$

Starter 13



1. Which is greater: $2\frac{1}{3}$ or $2\frac{2}{5}$?
2. Convert $\frac{23}{6}$ to a mixed number.
3. Consider the diagram on the left, fill in the blanks to demonstrate subtraction using improper fractions:

$$3\frac{1}{4} - 1\frac{3}{4} = \frac{?}{4} - \frac{?}{4} = \frac{?}{4} = ?\frac{?}{?}$$

4. $3\frac{3}{5} - 1\frac{1}{5}$
5. $4\frac{5}{6} - 2\frac{1}{6}$
6. $1\frac{2}{3} + 2\frac{1}{4}$
7. $4\frac{1}{4} - 1\frac{1}{2}$
8. $3\frac{1}{3} - 1\frac{3}{4}$
9. $5\frac{1}{3} - 2\frac{3}{4}$

Starter 14

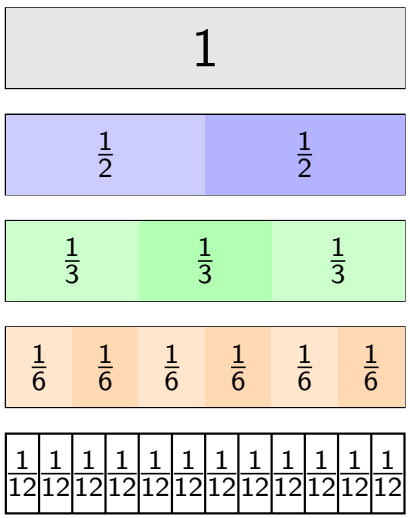
1. Fully simplify: $\frac{15}{20}$

2. Fully simplify: $\frac{72}{96}$

3. Use the fraction wall to fill in the blanks:

$$\frac{1}{2} + \frac{?}{6} = 1 \qquad \frac{?}{3} + \frac{?}{6} = 1$$

Fraction wall



4. $2\frac{3}{4} + 1\frac{2}{3}$

5. $4\frac{1}{5} - 1\frac{3}{4}$

6. Maya says: "$\frac{1}{2} + \frac{1}{3} = \frac{2}{5}$". Explain the mistake and find the correct answer.

7. Amir eats $\frac{3}{8}$, Beth eats $\frac{1}{4}$, Cal eats $\frac{1}{3}$ of a pizza. What fraction is left?

8. Fill in the blanks: $3\frac{1}{4} + \square\frac{\square}{\square} = 5\frac{1}{6}$

9. True or false? $\frac{a}{b} + \frac{a}{c} = \frac{2a}{b+c}$. Can you explain your answer with a proof/counterexample?