

How could we manage this without a diagram?

Please click here for a video of this explanation <https://youtu.be/ZQiVrZg96qw>

We know that when we are dealing with sevenths that we need seven sevenths to make a whole so

$$15 \div 7 = 2 \text{ remainder } 1 \text{ so } \frac{15}{7} = 2 \frac{1}{7}.$$

More examples:-

Write $\frac{17}{9}$ as a mixed number.

We know that when we are dealing with ninths that we need nine ninths to make a whole so

$$17 \div 9 = 1 \text{ remainder } 8 \text{ so } \frac{17}{9} = 1 \frac{8}{9}.$$

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

We know that when we are dealing with fifths that we need five fifths to make a whole so

$$23 \div 5 = 4 \text{ remainder } 3 \text{ so } \frac{23}{5} = 4 \frac{3}{5}.$$

Now write these improper (top-heavy) fractions as mixed numbers: -

6) $\frac{15}{4}$

7) $\frac{17}{5}$

8) $\frac{18}{7}$

9) $\frac{19}{8}$

10) $\frac{17}{9}$

11) $\frac{21}{8}$

12) $\frac{23}{7}$

13) $\frac{25}{6}$

14) $\frac{24}{5}$

15) $\frac{19}{4}$

Finally, complete these examples, writing your answer as a mixed number and remembering to simplify where necessary.

16) $\frac{3}{5} + \frac{4}{5}$

17) $\frac{5}{6} + \frac{5}{6}$

18) $\frac{6}{7} + \frac{4}{7}$

19) $\frac{7}{8} + \frac{5}{8}$

20) $\frac{7}{9} + \frac{5}{9}$

21) $\frac{7}{10} + \frac{8}{10}$

22) $\frac{5}{9} + \frac{6}{9}$

23) $\frac{5}{8} + \frac{5}{8}$

24) $\frac{5}{7} + \frac{6}{7}$

25) $\frac{4}{6} + \frac{5}{6}$