

Adding Fractions Sheet 2 - Challenges

Below are some challenging questions.

Top tips:

Make sure the fractions have the same denominators before you try the calculation.

Sometimes drawing diagrams or pictures can help.

1. Katie eats $\frac{1}{6}$ of a pizza. Later, she eats another $\frac{5}{12}$. How much of the pizza has she eaten?
2. Hayley eats $\frac{2}{3}$ of her sandwich. Mary eats another $\frac{1}{4}$ of the sandwich. How much of the sandwich has been eaten altogether?
3. Thomas does $\frac{3}{5}$ of his homework one night. He does another $\frac{3}{10}$ the next night. How much of his homework is left to complete?
4. Sara has $\frac{5}{7}$ of a cake left. She eats another $\frac{9}{21}$. How much is left?
5. Joe is trying to run a race. He has $\frac{4}{5}$ of the race left. He managed to run another $\frac{3}{8}$ and then gives up. How much of the race is left?
6. Miss Allen spends $\frac{3}{7}$ of her weekend working, $\frac{2}{28}$ at the gym, $\frac{7}{14}$ of it sleeping and the rest of the time playing computer games. What fraction of time is she playing computing games?

Even More Challenge:

- 1) Sally has $\frac{2}{3}$ of a sandwich left. She eats some more and then has $\frac{1}{4}$ left. How much did she eat?
- 2) Bob eats $\frac{1}{5}$ of a cake. Timmy then eats some more. Jeff then complains as there is only $\frac{1}{9}$ left. He says that Timmy much have eaten more than half of the cake. Is Jeff correct? Justify your answer with working out.

On the next page I have included the answers. If you get any wrong go back and try and work out why it was wrong.

Answers:

1) $\frac{1}{6} + \frac{5}{12} = \frac{7}{12}$

2) $\frac{8}{12} + \frac{3}{12} = \frac{11}{12}$

3) $\frac{6}{10} + \frac{3}{10} = \frac{9}{10}$ $1 - \frac{9}{10} = \frac{1}{10}$

4) $\frac{15}{21} - \frac{9}{21} = \frac{6}{21} = \frac{2}{7}$

5) $\frac{32}{40} - \frac{15}{40} = \frac{17}{40}$

6) $\frac{6}{14} + \frac{1}{14} + \frac{7}{14} = 1$ so none of his time.

Challenge:

1) $\frac{2}{3} - ? = \frac{1}{4}$ $\frac{8}{12} - \frac{3}{12} = \frac{5}{12}$

- 2) Jeff is correct, because Bob ate $\frac{1}{5}$ of cake which can be turned into $\frac{9}{45}$. If there was only $\frac{1}{9}$ which is the same as $\frac{5}{45}$ it means that Timmy ate $\frac{31}{45}$ of cake. Half of 45 would be 22.5 so Timmy definitely ate more than a half.