

# Solving Problems with Fractions!

1. You give  $\frac{1}{3}$  of box of brownies to Ella and  $\frac{1}{6}$  of the pan of brownies to Nick. How much of the box of brownies did you give away?
2. James went out for a long walk. He walked  $\frac{3}{4}$  mile and then sat down to take a rest. Then he walked  $\frac{1}{8}$  of a mile. How far did he walk altogether?
3. Sam walks  $\frac{7}{8}$  of a mile to school. Alice walks  $\frac{1}{2}$  of a mile to school. How much farther does Sam walk than Alice?
4. Billy made two types of cookies. He used  $\frac{2}{3}$  cup of sugar for one recipe and  $\frac{1}{4}$  cup of sugar for the other. How much sugar (in cups) did he use in all?
5. There is  $\frac{3}{8}$  of a pizza in one box and  $\frac{1}{4}$  of a pizza in another box. How much do you have altogether?
6.  $\frac{1}{10}$  of the M&M's in a bag are red and  $\frac{1}{5}$  are blue. What fraction of all the M&M's are red and blue?
7. A jug contains  $\frac{3}{4}$  pints of orange juice. After you pour  $\frac{5}{8}$  of a pint into a glass, how much is left in the jug?
8. Jackie has  $\frac{1}{3}$  of a Galaxy bar. Nathan has  $\frac{4}{12}$  of a Galaxy bar. How much do they have together?
9. At a class party  $\frac{3}{6}$  of a vegetarian pizza and  $\frac{1}{3}$  of a meat-feast pizza were eaten. How much pizza was eaten altogether?
10. Amy ran  $\frac{2}{3}$  of a marathon. Beth ran  $\frac{5}{6}$  of a marathon. Who ran farther? How much farther?
11. Liam and Sam shared a chocolate bar. Liam ate  $\frac{3}{5}$  and Sam ate  $\frac{4}{10}$ . Who ate more? How much more?
12. A running track is one kilometre long. If I jog for  $\frac{1}{6}$ km and run for  $\frac{2}{3}$ km will I complete the full distance of the track?

## CHALLENGE!

These ones involve mixed numbers and are a bit trickier. See how many you can solve.

- A. For the school's sports day, a group of students prepared  $12\frac{1}{2}$  litres of lemonade. At the end of the day they had  $2\frac{5}{8}$  litres left over. How many litres of lemonade were sold?
- B.  $3\frac{4}{6}$  mini-pizzas were left in the fridge; the children ate  $1\frac{2}{3}$  of them. How much pizza is left for the adults? Give your answer as a mixed number and as an improper fraction?
- C. Extension: Create your own mixed number/improper fraction multi-step word problem for your partner to solve...

# Solving Problems with Fractions!

Remember to use RUCSAC to help you decide what maths you need to use.

1. You give  $\frac{1}{3}$  of box of brownies to Ella and  $\frac{1}{6}$  of the pan of brownies to Nick. How much of the box of brownies did you give away?  **$\frac{3}{6}$  or  $\frac{1}{2}$**
2. James went out for a long walk. He walked  $\frac{3}{4}$  mile and then sat down to take a rest. Then he walked  $\frac{1}{8}$  of a mile. How far did he walk altogether?  **$\frac{7}{8}$  of a mile.**
3. Sam walks  $\frac{7}{8}$  of a mile to school. Alice walks  $\frac{1}{2}$  of a mile to school. How much farther does Sam walk than Alice? **Alice -  $\frac{4}{8}$ , so Sam walks  $\frac{3}{8}$  more.**
4. Billy made two types of cookies. He used  $\frac{2}{3}$  cup of sugar for one recipe and  $\frac{1}{4}$  cup of sugar for the other. How much sugar (in cups) did he use in all?  **$\frac{11}{12}$  of a cup**
5. There is  $\frac{3}{8}$  of a pizza in one box and  $\frac{1}{4}$  of a pizza in another box. How much do you have altogether?  **$\frac{5}{8}$**
6.  $\frac{1}{10}$  of the M&M's in a bag are red and  $\frac{1}{5}$  are blue. What fraction of all the M&M's are red and blue?  **$\frac{3}{10}$**
7. A jug contains  $\frac{3}{4}$  pints of orange juice. After you pour  $\frac{5}{8}$  of a pint into a glass, how much is left in the jug?  **$\frac{1}{8}$**
8. Jackie has  $\frac{1}{3}$  of a Galaxy bar. Nathan has  $\frac{4}{12}$  of a Galaxy bar. How much do they have together?  **$\frac{8}{12}$**
9. At a class party,  $\frac{3}{6}$  of a vegetarian pizza and  $\frac{1}{3}$  of a meat-feast pizza were eaten. How much pizza was eaten altogether?  **$\frac{5}{6}$**
10. Amy ran  $\frac{2}{3}$  of a marathon. Beth ran  $\frac{5}{6}$  of a marathon. Who ran farther? How much farther? **Amy ran  $\frac{4}{6}$  so Beth ran further by  $\frac{1}{6}$ .**
11. Liam and Sam shared a chocolate bar. Liam ate  $\frac{3}{5}$  and Sam ate  $\frac{4}{10}$ . Who ate more? How much more? **Liam ate  $\frac{6}{10}$ , so  $\frac{2}{10}$  more.**
12. A running track is one kilometre long. If I jog for  $\frac{1}{6}$ km and run for  $\frac{2}{3}$ km will I complete the full distance of the track? **No, you will run  $\frac{5}{6}$**

## CHALLENGE!

These ones involve mixed numbers and are a bit trickier. See how many you can solve.

- A. For the school's sports day, a group of students prepared  $12\frac{1}{2}$  litres of lemonade. At the end of the day they had  $2\frac{5}{8}$  litres left over. How many litres of lemonade were sold?  **$\frac{79}{8}$  or  $9\frac{7}{8}$  litres.**
- B.  $3\frac{4}{6}$  mini-pizzas were left in the fridge; the children ate  $1\frac{2}{3}$  of them. How much pizza is left for the adults? Give your answer as a mixed number and as an improper fraction?  **$\frac{12}{6}$  or 2 mini pizzas**
- C. Extension: Create your own mixed number/improper fraction multi-step word problem for your partner to solve...