Multiplying Fractions Word Problems

Show your working out clearly.

Write your answers in their simplest forms.

Where appropriate, write your answers as mixed numbers.

1. What is $\frac{1}{4}$ of $\frac{1}{2}$?

2. What is $\frac{2}{3}$ of $\frac{3}{4}$?

3. If Olivia's sunflower grows $\frac{5}{8}$ of a centimetre every day, how much taller will it be after 3 weeks?

4. Newspapers are $\frac{1}{2}$ cm thick. How thick would a stack of 21 newspapers be?

5. Tyler has 30 sweets. $\frac{2}{5}$ of them are red.

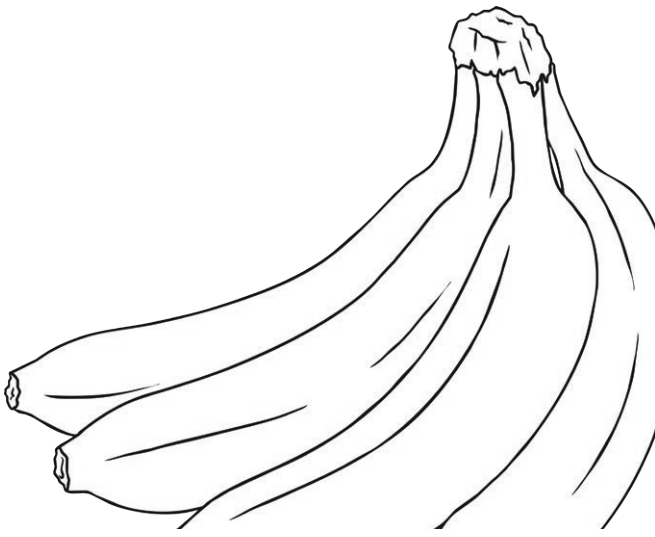
   Lewis has 20 sweets. $\frac{3}{4}$ of them are red.

   Who has more red sweets?

6. John bought 12 bananas. He ate $\frac{1}{2}$ of his bananas.

   Richard bought 9 bananas. He ate $\frac{1}{3}$ of his bananas.

   How many more bananas did John eat than Richard?



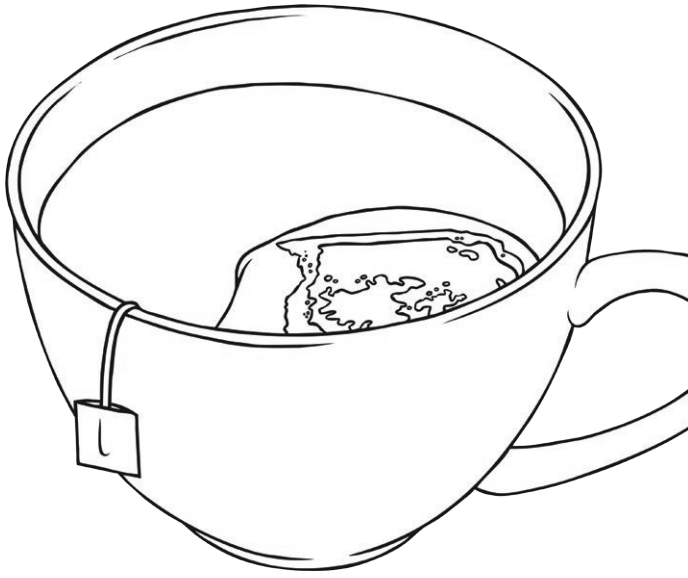
7. There are 15 dogs at the park. Each dog needs $\frac{2}{5}$ of a litre of water to drink.
How many litres do you need in total if each dog at the park were to get a drink?

8. There are 36 footballs in a locker. They are either yellow or white. $\frac{4}{9}$ are white.
How many are yellow?

Challenge Questions

1. A snooker ball is $\frac{26}{5}$ cm wide. A snooker table is 178cm wide. All 23 snooker balls are placed side by side along the width of the table. How many centimetres are there between the end of the line of snooker balls and the side of the table?

2. 20 teachers have a cup of tea at break time. $\frac{2}{5}$ of these teachers are women. $\frac{3}{4}$ of the teachers had sugar in their tea, $\frac{3}{5}$ of which were male. How many male teachers didn't have sugar?



Multiplying Fractions Word Problems **Answers**

1. $\frac{1}{8}$

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

3. **13** $\frac{1}{8}$ **cm**

4. $\frac{21}{2}$ **or 10** $\frac{1}{2}$ **cm.**

5. **Tyler has 12 red sweets.**
   Lewis has 15 red sweets.
   Lewis has more red sweets.

6. **John ate 6 bananas.**
   Richard ate 3 bananas.
   John ate 3 more bananas.

7. **6 litres.**

8. **20 yellow balls.**

Challenge Questions

1. $\frac{26}{5} \times 23 = \frac{598}{5}$

   $\frac{598}{5}$ **cm** $\div 5 = \frac{598}{25}$

   178 - $\frac{598}{25}$ **cm = 58** $\frac{2}{5}$ **cm**

2. **20 ×** $\frac{2}{5}$ **= 8**

   20 - 8 = 12 male teachers altogether.

   20 × $\frac{3}{4}$ **= 15 teachers had sugar.**

   15 × $\frac{3}{5}$ **= 9 male teachers had sugar.**

   12 - 9 = 3

   3 male teachers