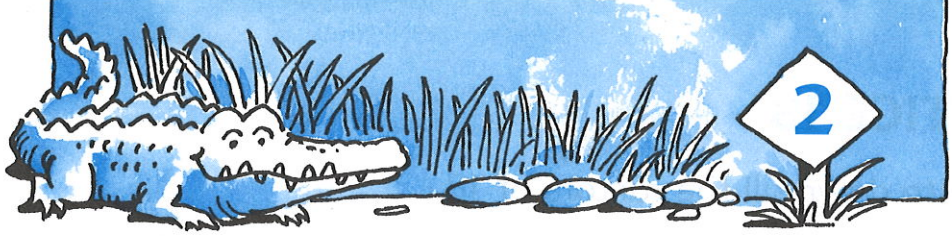
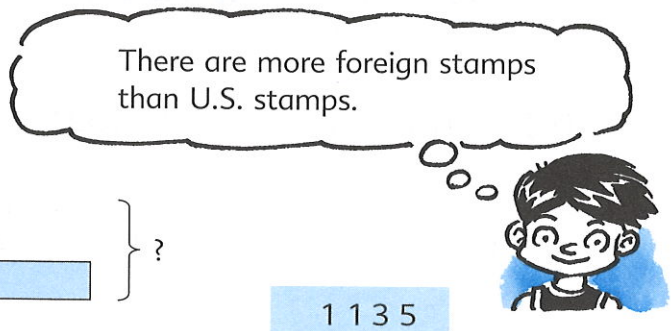
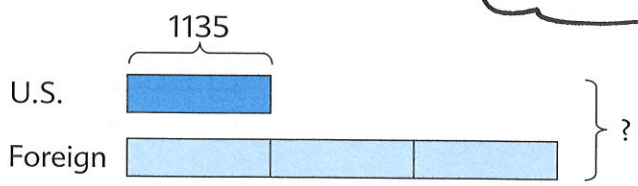


Multiplication and Division of Whole Numbers

1 Multiplication by a 1-digit Number, Division by a 1-digit Number and by 10

Sean has 1135 U.S. stamps.
He has 3 times as many foreign stamps as U.S. stamps.
(a) How many stamps does he have altogether?

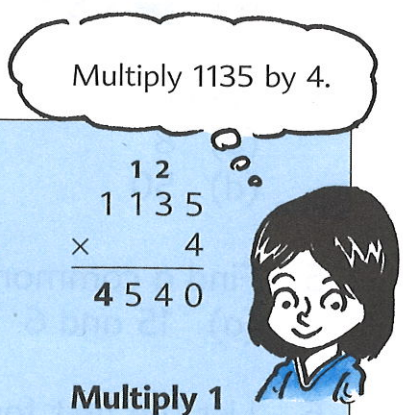




$1135 \times 4 = 4540$

$$\begin{array}{r} 1135 \\ \times \quad 4 \\ \hline 4540 \end{array}$$

He has 4540 stamps altogether.



$$\begin{array}{r} {\scriptstyle 2} \\ 1135 \\ \times \quad 4 \\ \hline 0 \end{array}$$

Multiply 5 ones by 4.

$$\begin{array}{r} {\scriptstyle 12} \\ 1135 \\ \times \quad 4 \\ \hline 40 \end{array}$$

Multiply 3 tens by 4. Add 2 tens.

$$\begin{array}{r} {\scriptstyle 12} \\ 1135 \\ \times \quad 4 \\ \hline 540 \end{array}$$

Multiply 1 hundred by 4. Add 1 hundred.

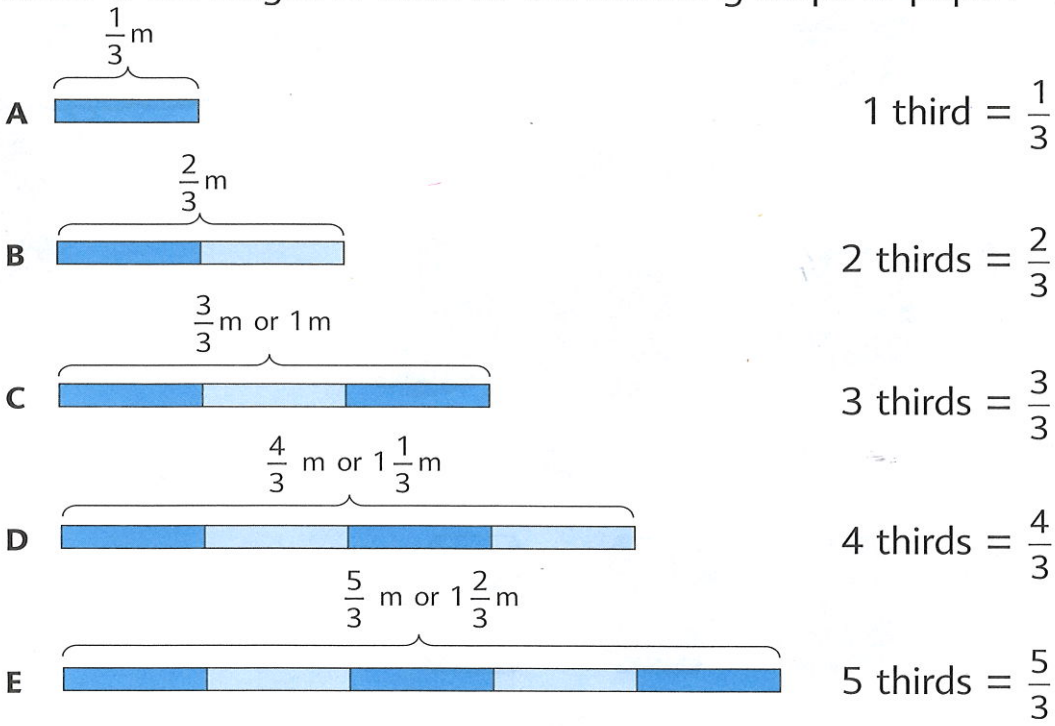
$$\begin{array}{r} {\scriptstyle 12} \\ 1135 \\ \times \quad 4 \\ \hline 4540 \end{array}$$

Multiply 1 thousand by 4.

When 1135 is multiplied by 4, the **product** is 4540.

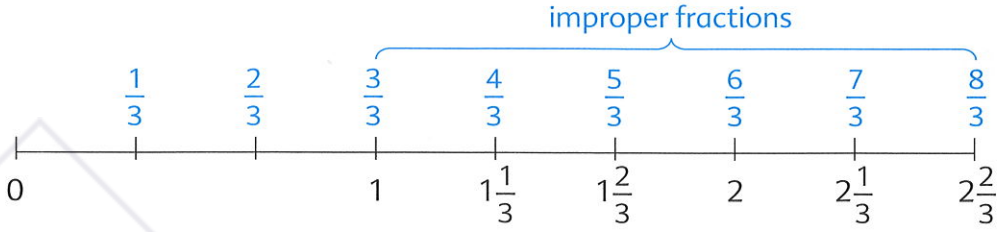
4 Improper Fractions

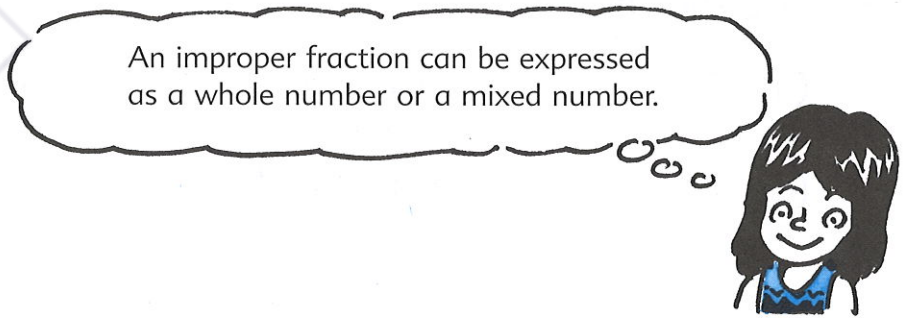
What is the length of each of the following strips of paper?



$\frac{3}{3}$, $\frac{4}{3}$ and $\frac{5}{3}$ are **improper fractions**.

An improper fraction is equal to or greater than 1.





PRACTICE 3C

Multiply. Give each answer in its simplest form.

	(a)	(b)	(c)	(d)
1.	$\frac{1}{3} \times 18$	$\frac{3}{4} \times 32$	$\frac{1}{6} \times 4$	$\frac{5}{9} \times 15$
2.	$36 \times \frac{1}{4}$	$15 \times \frac{2}{5}$	$6 \times \frac{1}{8}$	$10 \times \frac{3}{4}$

3. Peter had a board 3 m long.

   He used $\frac{3}{4}$ of its length as a bookshelf.

   How long was the bookshelf?

4. Jane practices on the piano for $\frac{3}{4}$ hour a day.

   How many hours does she practice on the piano in 5 days?

5. In a class, $\frac{2}{5}$ of the students wear glasses.

   (a) What fraction of the students do **not** wear glasses?

   (b) If 16 students wear glasses, how many students are there altogether?

6. Aminah bought 30 eggs.

   She used $\frac{2}{3}$ of the eggs to bake cakes.

   How many eggs did she have left?

7. Lily bought some picture cards.

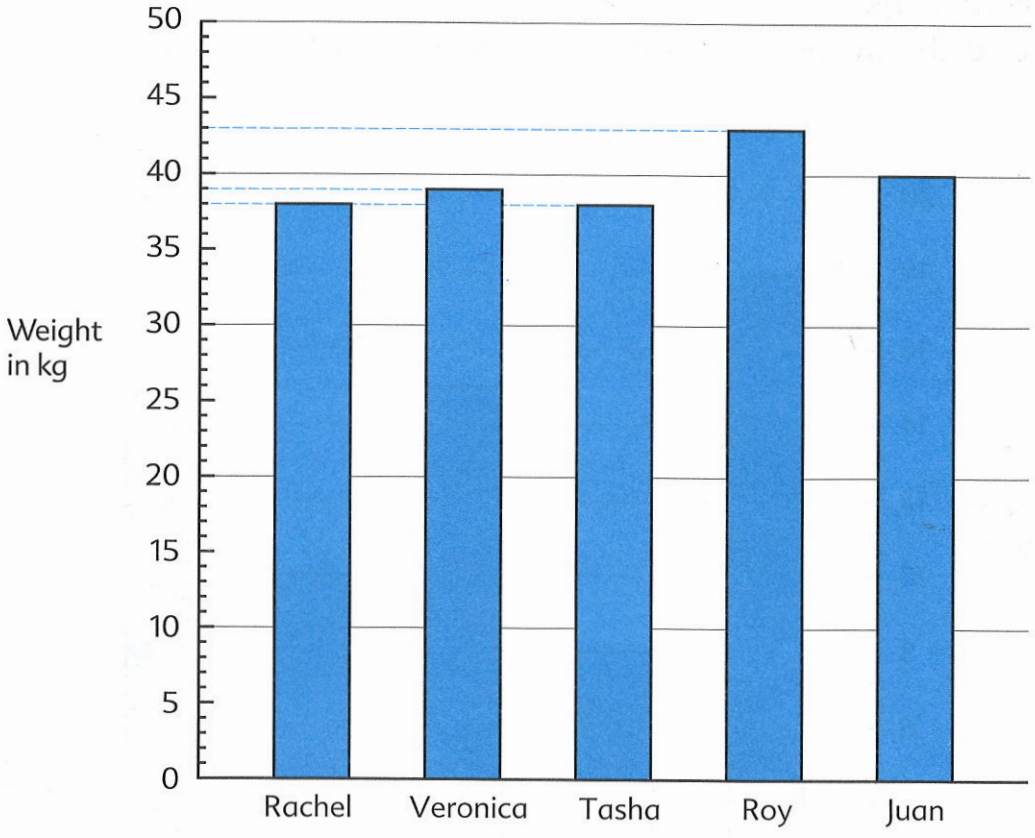
   She gave $\frac{1}{3}$ of them to Matthew.

   If she gave 8 picture cards to Matthew, how many picture cards did she buy?

8. Kevin spent $\frac{1}{4}$ of his money on a storybook.

   If the storybook cost \$6, how much money did he have at first?

The data can also be presented in a bar graph:



1. This table shows the number of storybooks read by four children in one month.

Name	Number of books
David	8
Pablo	16
Lauren	14
Rosa	10

(a) Who read the greatest number of storybooks in one month?

(b) How many more storybooks did Lauren read than David in one month?

(c) Draw a bar graph to show the data given in the table.