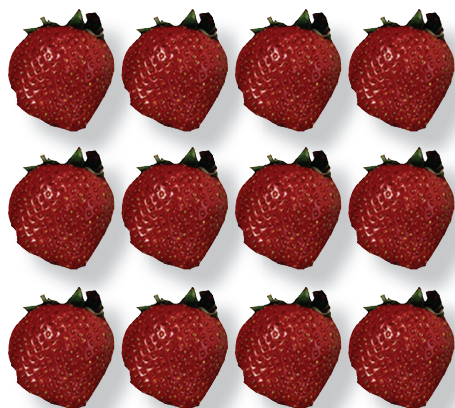


4 Factors



$$3 \times 4 = 12$$

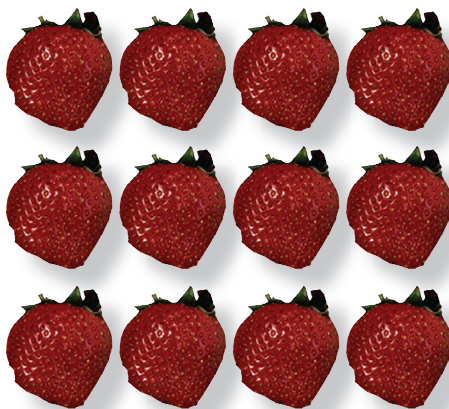
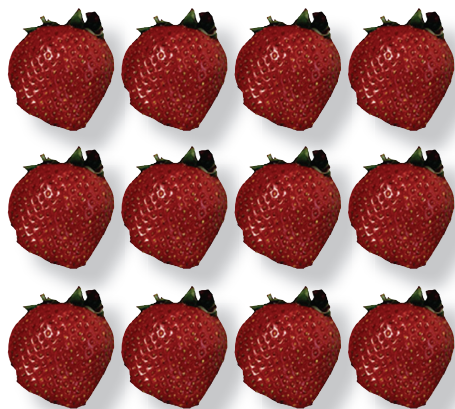
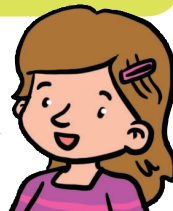
12 is the product of 3 and 4.

factor \times factor =
product



12 is a multiple of 3.
It is also a multiple of 4.

3 and 4 are **factors** of 12.



$$2 \times 3 \times 4 = 24$$

24 is the **product** of 2, 3 and 4.
2, 3 and 4 are **factors** of 24.

1.



$$1 \times 6 = 6$$



$$2 \times 3 = 6$$

We can write some numbers as a product of factors in different ways.



1, 2,  and  are factors of 6.

Is 4 a factor of 6?

Is 5 a factor of 6?


2.



$$2 \times 8 = 16$$

2 and 8 are factors of 16.
Name other factors of 16.



$$\text{} \times 4 = 16$$



3.



$$1 \times 5 = 5$$

5 has only two factors, 1 and itself, 5.

Can I make more than one equal row?

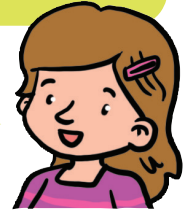
A number greater than 1 is a **composite number** if it has at least two factors that are not 1. The factors of 16 are 1, 2, 4, 8 and 16. So, 16 is a composite number.



A number greater than 1 is called a **prime number** if it has exactly two factors, 1 and the number itself. So, 5 is a prime number.

4. Find the factors of each number.
Which numbers are prime numbers?

- (a) 7 (b) 9 (c) 3 (d) 18
(e) 11 (f) 15 (g) 10 (h) 13

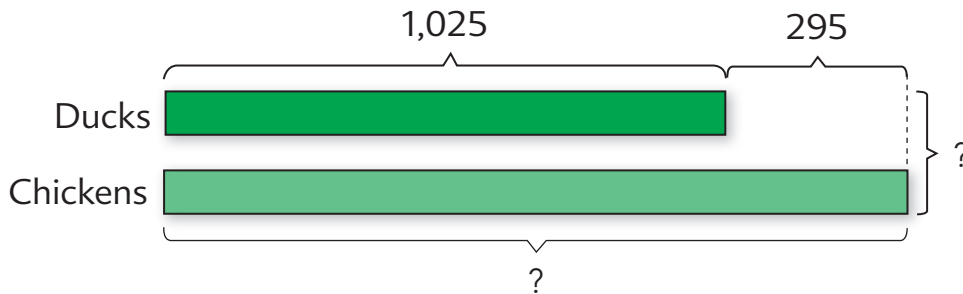


1 is not a prime number or a composite number.



5. (a) Which of the following numbers have 2 as a factor?
8, 10, 15, 24
(b) Which of the following numbers have 5 as a factor?
15, 20, 25, 32

22. A farmer has 1,025 ducks. He has 295 more chickens than ducks. How many chickens and ducks does he have altogether?



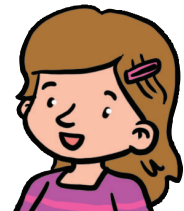
$$1,025 + 295 = 1,320$$

He has 1,320 chickens.

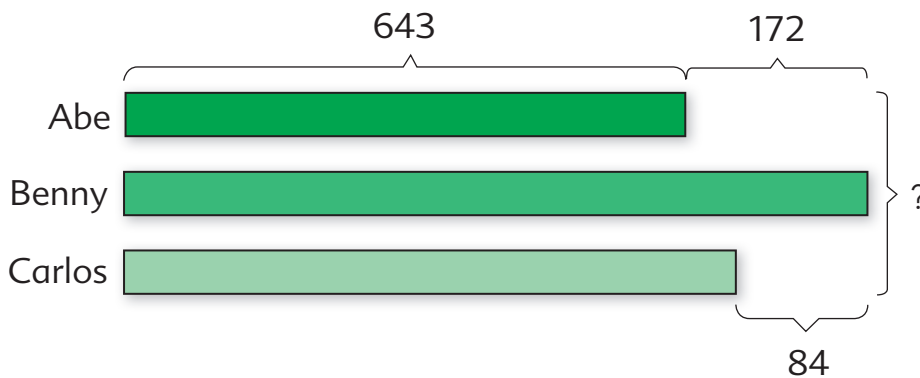
$$1,025 + 1,320 = \text{orange square}$$

He has chickens and ducks altogether.

Find the number of chickens first.



23. Abe scored 643 points in a game. Benny scored 172 points more than Abe and 84 points more than Carlos. How many points did the three boys score altogether?

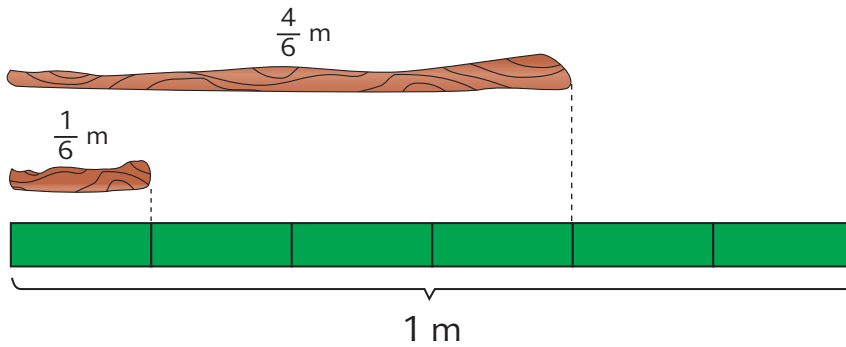


How many points did Benny score?
 How many points did Carlos score?
 How many points did they score altogether?



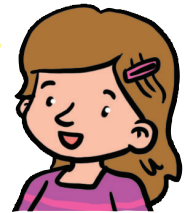
They scored points altogether.

3 Multiplying a Fraction and a Whole Number



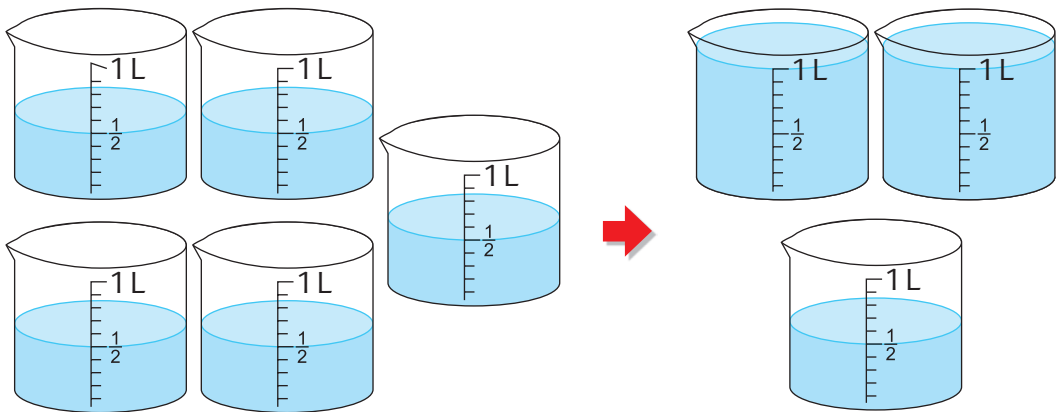
(a) $\frac{4}{6} \text{ m}$ is times as long as $\frac{1}{6} \text{ m}$.

$$\frac{1}{6} \times 4 = \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} = \frac{4}{6} = \frac{2}{3}$$



(b) Sam drinks $\frac{1}{2}$ a liter of milk a day.

How many liters of milk will he drink in 5 days?



$$\begin{aligned} \frac{1}{2} \times 5 &= \frac{5}{2} \\ &= 2\frac{1}{2} \end{aligned}$$

$$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = \frac{5}{2}$$

He will drink $2\frac{1}{2}$ liters of milk in 5 days.

$$\frac{1}{2} \times 5 = \frac{1 \times 5}{2}$$

