

1. A party planner orders b blue, g gold, p purple, r red, s silver and w white balloons.

Here is a list of what he orders: $b = 15$
 $g = 50$
 $p = 30$
 $r = 75$
 $s = 40$
 $w = 20$

Complete this table for the number of balloons.

Price	expression	calculation
Regular	$b + p + r + w$	$15 + 30 + 75 + 20$
Premium		$50 + 40$

2. A gardener buys some bulbs.

He buys a packets of allium, c packets of crocus and t packets of tulip bulbs.

The gardener wrote $a = 5$, $c = 15$ and $t = 65$

To work out the total number number of packets of bulbs, B , he bought he could:

- (i) do the **calculation**
- (ii) use the **formula**
- (iii) use the **expression**

You may use $B = a + c + t$ $a + c + t$ $5 + 15 + 65$

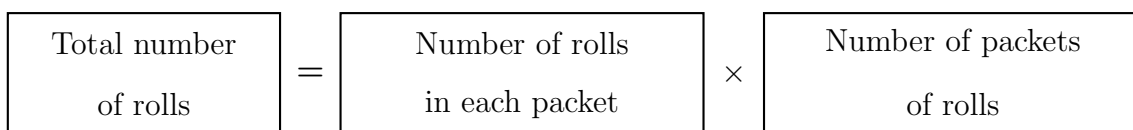
3. (a) A multipack contains b packs of barbecue flavour crisps, and c packs of cheese and onion flavour crisps.

Write down an expression for the total number of packs of crisps in the multipack.

- (b) A multipack contains b packs of barbecue flavour crisps, c packs of cheese and onion flavour crisps and r packs of ready salted crisps.

Write down an expression for the total number of packs of crisps in the multipack.

4. Here is a word formula



Write an algebra formula to calculate r , the total number of rolls in p packets of 4 rolls.

5. If supermarkets don't reduce the price of food close enough to the sell by date, they often have to throw food away.

A supermarket worker has to throw away some fruit.

First she has to throw away 15 bags of apples.

Each bag contains 6 apples.

(a) Write down a **calculation** to work out the total number of apples she throws away.

Next she throws away b bunches of bananas.

There are 7 bananas in a bunch.

(b) Write down an **expression**, in terms of b , for the total number of bananas she throws away.

Then she throws away 14 punnets of peaches.

There are p peaches in a punnet.

She throws away a total of T peaches.

(c) Write down a **formula** for T , in terms of p .

6. In this question you will turn a situation into a word formula and into an algebra expression.

(a) Read the situation.

A cook buys 4 box of eggs.

There are e eggs in a box.

Write an expression, in terms of e , for the total number of eggs bought.

(b) Complete these:

THING: CONTAINER:

egg, box

(c) Complete the word formula with the correct words.

Total number of THINGS	=	Number of CONTAINERS	×	Number of THINGS in one CONTAINER
Total number of	=	Number of	×	Number of in one

algebra expression is ×

(d) Complete the algebra expression (above) with the correct letters or numbers.

(e) Simplify the algebra expression and write it on the answer line.

7. (a) A hotel buys some towels.
They buy 7 packets of hand towels.
Each packet contains h hand towels.
They buy a total of T hand towels.
Write a formula for T , in terms of h .
- (b) A hotel buys some towels.
They buy b packets of bath towels.
Each packet contains 6 bath towels.
Write an expression, in terms of b , for the total number of bath towels the hotel buys.
8. Not written yet
9. (a) The catering manager has n packets of apples.
There are 6 apples in a packet.
(i) Write down an expression, in terms of n , for the total number of apples the catering manager has.
11 of the apples are used to make up packed lunches for a school trip.
(ii) Write down an expression, in terms of n , for the number of apples the catering manager has now.
- (b) Layla has written 3 numbers on a piece of paper.
She says "The first number is n "
She says "The second number is 4 times the first number"
(i) Write down an expression, in terms of n , for Layla's second number.
She says "The third number is 6 less than the second number"
(ii) Write down an expression, in terms of n , for Layla's third number.
- (c) Harrison is y years old.
Harrison's grandpa is 6 times as old as Harrison.
(i) Write down an expression, in terms of y , for the age of Harrison's grandpa.
Harrison's sister is 46 years younger than Harrison's grandpa.
(ii) Write down an expression, in terms of y , for the age of Harrison's sister.
10. A hotel buys some glasses.
They buy m packets of wine glasses.
They buy n packets of water glasses.
Each packet of wine glasses contains 4 glasses.

Each packet of water glasses contains 6 glasses.

They buy a total of T glasses.

Write a formula for T , in terms of m and n .