1) a) Children should draw a blue square, a blue circle, a blue triangle, a blue rectangle, a green square, a green circle, a green triangle and a green rectangle.
b)

| Shape | square | circle | triangle | rectangle | square | circle | triangle | rectangle |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Colour | blue | blue | blue | blue | green | green | green | green |

2) Vanilla and a cherry Vanilla and a flake

Vanilla and sprinkles

| Strawberry and a cherry | Chocolate and a cherry |
| :--- | :--- |
| Strawberry and a flake | Chocolate and a flake |
| Strawberry and sprinkles | Chocolate and sprinkles |

1) a) $3 \times 4=12$

There are 12 different combinations.
2) 9
3) a) Saif and Robin are correct.
b) Saif's way is the best because it is quicker. He can calculate the answer without having to find all the different possibilities.

1) a)

| Size of Pizza | Pizza Topping | Number of Different Pizzas |
| :---: | :---: | :---: |
| small pizza base <br> medium pizza base <br> large pizza base | pepperoni | 3 |
|  | pepperoni <br> mushroom | 6 |
|  | pepperoni <br> mushroom <br> olives | 9 |


b) The answer goes up by 3 each time.
c) There are always three pizza bases, but one more topping is added each time, so the number to be multiplied by 3 increases by 1.
d) 30
2) a) 5
b) There are 8 different possibilities:

1 size of pizza and 24 toppings 12 sizes of pizza and 2 toppings 4 sizes of pizza and 6 toppings
24 sizes of pizza and 1 topping
2 sizes of pizza and 12 toppings
3 sizes of pizza and 8 toppings
6 sizes of pizza and 4 toppings
c) No. 24 is not in the 5 times table, so 5 lots of toppings would not multiply with another number to make 24 different kinds of pizzas.

