1) Complete the ratio statement about these shapes.

For every _____ squares there are _____ circles.

The ratio of squares to circles is ____:____.
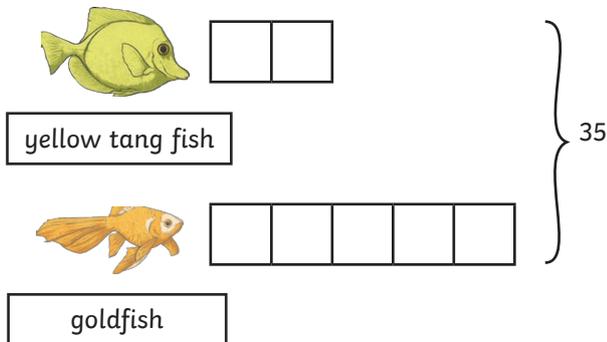
Use this to help you answer the following questions.

a) If there are 18 circles, how many squares will there be? _____

b) If there are 10 squares, how many circles will there be? _____

2) In her fish tank, Alice has two yellow tang fish to every five goldfish.

There are 35 fish in her fish tank. How many of each type are there?

Use the bar model to help you solve the problem.

yellow tang fish

35

goldfish

There are [ ] yellow tang fish.

There are [ ] goldfish.

3) Jamil eats a large box of chocolates with his friends and family. For every three dark chocolates, they eat two milk chocolates.

 dark chocolates

 milk chocolates

a) If they eat nine dark chocolates, how many milk chocolates do they eat?

_____

b) If they ate 45 chocolates, how many of each type of chocolate would they have eaten?

_____

_____

1) Two types of balls are placed in a bag so that there are 3 basketballs to every 5 footballs.
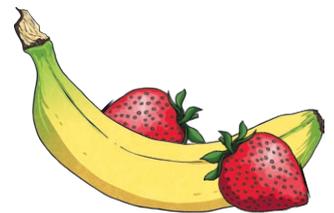
☐   **Alice** says, "I think that if I have 12 basketballs I will also have 15 footballs."

☐   **Hardeep** says, "I think if there were 40 balls in the bag then I would have 15 basketballs and 25 footballs."

Tick or cross the box next to each statement to show whether you agree or not and correct any statements which are incorrect.

_____

_____

2) Jenny is making a fruit smoothie using bananas and strawberries. For every five bananas she uses two strawberries.

24p each

18p each

Decide if each of these statements are true or false and correct any statements which are incorrect.

a) If Jenny spends 36p on strawberries, she will need to buy twelve bananas.

_____

_____

b) If Jenny spends £2.40 on bananas, she will need to buy four strawberries.

_____

_____

c) If Jenny uses 20 bananas, she will need to spend 72p on strawberries.

_____

_____

3) Jenny's friend, Sandeep, uses five bananas for every three strawberries to make two smoothies. He buys his fruit from the same shop as Jenny.

For the first smoothie, he used 20 bananas.
For the second smoothie, he used 9 strawberries.

Which smoothie was the most expensive to make?

_____

_____

_____

1) Two brothers, Ben and Joshua, are making squash for a party.

Ben makes squash using 2 parts orange juice to 3 parts water.
Joshua makes squash using 3 parts orange juice to 4 parts water.

Ben makes half a litre of squash for the party and Joshua makes 490ml of squash.

Who used more orange juice to make the squash?

2) A pizza restaurant sells the following pizzas:

a) On Monday, 60 people visit the restaurant and buy either a pepperoni or margherita pizza. The ratio of customers choosing pepperoni to margherita is 4:1.

How much did the restaurant make from the sales of pepperoni and margherita pizzas?

Pepperoni:
£8.49
Hawaiian:
£7.89
Margherita:
£6.49

b) On Tuesday, 60 people visit the restaurant and buy a pizza.
The ratio of customers choosing margherita to pepperoni to Hawaiian is 3:2:1.

Does the restaurant make more money on Monday or Tuesday?