Ratio and Proportion

1)

Tom buys 6 ice creams for £3.

£3
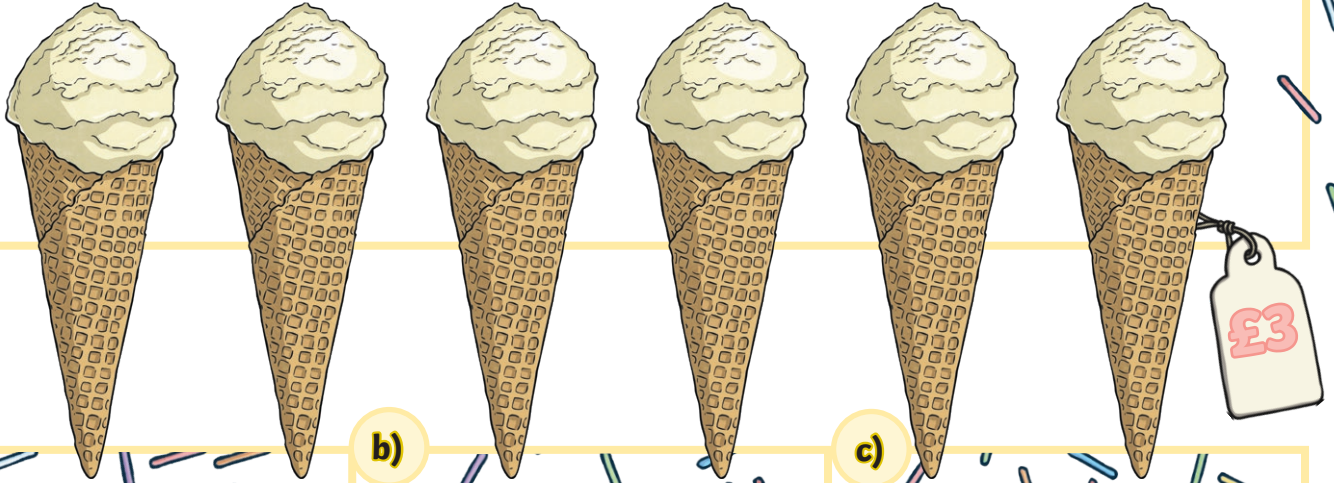
a) How much do 3 ice creams cost?

_____

b) How much for 12 ice creams?

_____

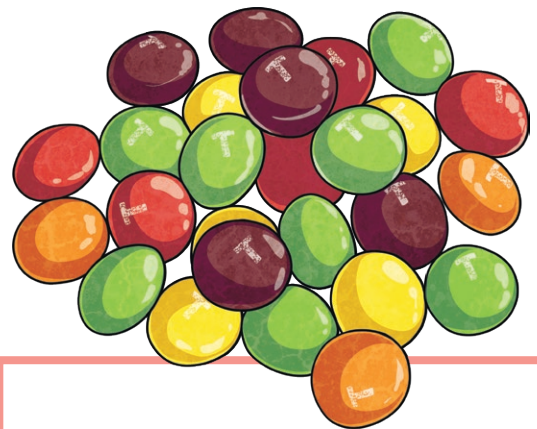**c)** What would the total for 15 ice creams cost?

_____

2)

Erin has two boxes of sweets.

In the first box, the ratio of purple and yellow sweets is 3:1.

In the second box, for every two pink sweets there are three black sweets. There is the same number of sweets in each box.

There are 12 black sweets in the second box.

How many sweets are there in total?

_____ sweets

Ratio and Proportion

3) Holly wants to make a jug of juice for a party. The drink is made using six parts apple juice and four parts lemonade.
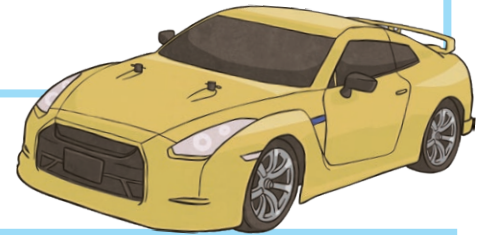
Holly makes 1.2 litres of this drink.

How much apple juice does she need?

_____ ml

4) The ratio of blue and yellow cars on the street is 3:1.

a) Explain what that means.

_____

_____

_____

b) There are 12 more blue cars than yellow cars on the street.

What is the total number of yellow cars on the street?

_____ yellow cars

Ratio and Proportion

5)

Two shops sell the same chocolate but in different-sized packaging.

Shop A

50g chocolate bar

£2.10

Shop B

75g chocolate bar

£3.30

Which shop is better value for money?

Shop _____

6)

Callum draws two similar quadrilaterals that are not squares.

My larger quadrilateral is 3 times the size of the smaller one.

Callum

The perimeter of the larger quadrilateral is 36cm.

The length and width of both quadrilaterals are even numbers.

What is the largest possible area for the small rectangle?

_____ cm^2

Ratio and Proportion

7)

Maisie is cooking some chocolate chip muffins for her friends and family. She has the list of some ingredients to make 6 chocolate chip muffins.

Ingredients

300g self-raising flour

60g butter

72g caster sugar

66g chocolate chips

a)

How much of each ingredient does Maisie need to make 3 muffins?

self-raising flour _____g

butter _____g

caster sugar _____g

chocolate chips _____g

b)

How much of each ingredient does Maisie need to make 10 muffins?

self-raising flour _____g

butter _____g

caster sugar _____g

chocolate chips _____g
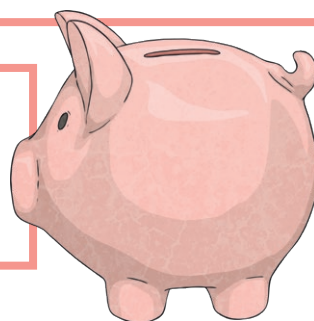
c)

Maisie has 198g of chocolate chips.

What is the maximum number of muffins she can make?

_____ muffins

8)

Imran has emptied his piggy bank. He has some 10p and 50p coins. For every three 10p coins he has, he has one 50p coin. There are 12 coins in the jar in total.

How much money is in the jar?

_____

Ratio and Proportion **Answers**

1) a) **£1.50**

   b) **£6.00**

   c) **£7.50**

2) **40** sweets

3) **720**ml

4) a) **Answers will vary. For example:**

   For every three blue cars, there is one yellow car.

   b) **6** yellow cars

5) Shop **A**

6) **8**cm^2

7) a) self-raising flour **150**g, butter **30**g, caster sugar **36**g, chocolate chips **33**g

   b) self-raising flour **500**g, butter **100**g, caster sugar **120g,** chocolate chips **110g**

   c) **18** muffins