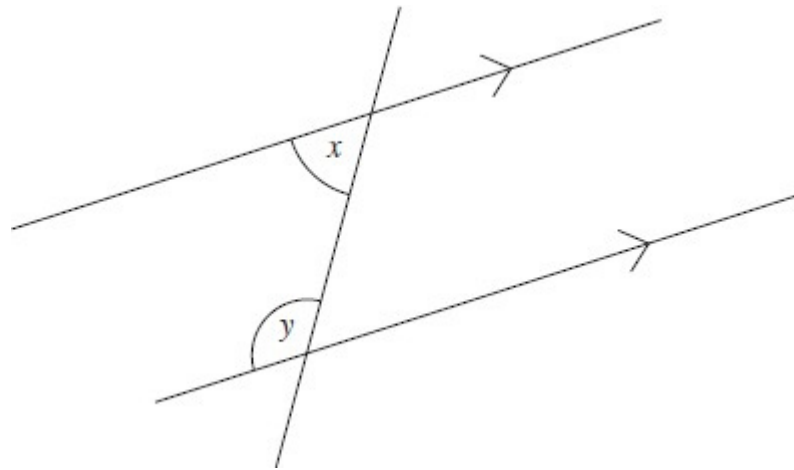


**Q1.**

Not drawn accurately



(a) Use the diagram to write an equation connecting  $x$  and  $y$ .

Answer .....

(1)

(b) The ratio  $x : y = 2 : 3$

Use this information to write another equation connecting  $x$  and  $y$ .

.....  
.....

Answer .....

(1)  
(Total 2 marks)

**Q2.**A fruit drink is made by mixing juice and lemonade in the ratio

$$\text{juice} : \text{lemonade} = 1 : 4$$

Juice costs £6.00 per litre.

Lemonade costs 50p per litre.

(a) Show that 1 litre of the fruit drink costs £1.60 to make.

.....  
.....  
.....

(3)

(b) The fruit drink is sold for £2 a litre.

Work out the percentage profit.

.....  
.....  
.....

Answer ..... %

(2)  
(Total 5 marks)

**Q3.** Alice has £4. Billie has twice as much as Alice.

Billie has two-thirds of the amount Chris has.  
The amount Chris has is four-fifths of his age in years.  
How old is Chris?

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

Answer ..... years

(Total 4 marks)

- Q4.(a)** A shop sells red roses and white roses in the ratio 7 : 2  
One day 392 red roses are sold.

How many white roses are sold?

.....  
.....

Answer .....

**(2)**

- (b) A different shop sells red roses and white roses in the ratio 8 : 3  
What is the probability that a rose, sold at random, is red?

.....

Answer .....

**(1)**

**(Total 3 marks)**