

Revision F3 (Topics 1-4) [39]

1.

Solve these equations

(a) $6r + 2 = 8$

(2)

(b) $7s + 2 = 5s + 3$

(3)

(c) $\frac{12-y}{3} = 5$

(3)

(Total 8 marks)

2.

Demi gives her dog $\frac{2}{3}$ of a tin of food each day.

Work out the smallest number of tins of food that she needs to feed her dog for 10 days.

(Total 3 marks)

3.

Expand and simplify $4(m + 3) + 3(2m - 5)$

(2)

(Total 2 marks)

4.

James invests £700 for 2 years at 10% per year compound interest.

How much interest does he earn?

(Total 2 marks)

5.

Work out the value of $\frac{p(2q+14)}{4}$ when $p = 5$ and $q = -3$

(Total 2 marks)

6.

Solve the inequality $2(5 - 3x) > 7$

(Total 3 marks)

7.

(a) During 2003 the average wage earned by some factory workers in Barnsley rose from £350 to £372.

What was the percentage increase?

(3)

(b) During 2003 the number of people out of work in Barnsley fell by 8%.

At the end of the year there were 2576 people out of work in Barnsley.

How many people were out of work at the beginning of the year?

(3)

(Total 6 marks)

8.

Make x the subject of the formula

$$y = \frac{3x + 4}{x - 3}$$

(Total 4 marks)

9.

Kieran, Jermaine and Chris play football.

- Kieran has scored 8 more goals than Chris.
- Jermaine has scored 5 more goals than Kieran.
- Altogether they have scored 72 goals.

How many goals did they each score?

(Total 5 marks)

10.

Non-calc

There are some red counters and some yellow counters in a bag.

There are 30 yellow counters in the bag.

The ratio of the number of red counters to the number of yellow counters is 1 : 6

(a) Work out the number of red counters in the bag.

Riza puts some more red counters into the bag.

The ratio of the number of red counters to the number of yellow counters is now 1 : 2

(b) How many red counters does Riza put into the bag?

(Total 4 marks)