



Programme 1 Worksheet 1: Programme Questions

Answer the following questions while you watch the programme.

1. What is the percentage discount on Ben's medallion?

2. What method does Katie use to find 15% in her head?

3. How much money did Ben save on the '60% off' T-shirt?

4. What were the original prices of each of Ben's three items?

(a) trainers _____

(b) T-shirt _____

(c) computer game _____

5. How many significant figures were asked for in the 'Tick or Trash' question?

6. Write down the correct formula for calculating a percentage change.

7. What is a BOGOF, and what percentage does it give you for free?

8. What special offer did Katie have in her hands when she was talking to the supermarket manager?

9. How many millilitres of shampoo are there in Ben's bottle?

10. How many 'free' bags of crisps does Ben take to the checkout?



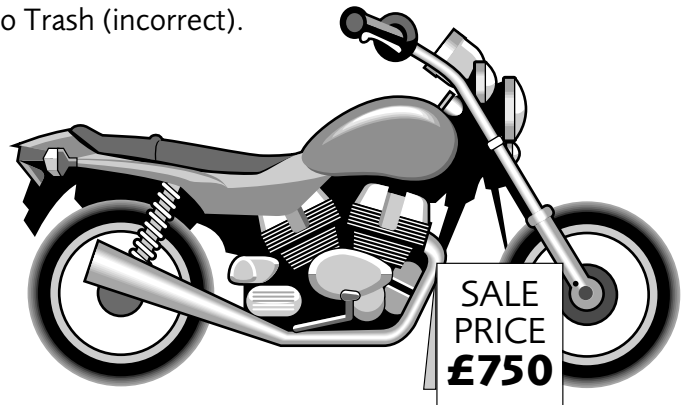
Programme 1 Worksheet 2: Tick or Trash

Here are some questions and answers (by Students A and B) on percentages.
Decide which answers to Tick (correct) and which to Trash (incorrect).
Give reasons.

Question 1

Mark sees a motorbike advertised for £750.

This is the price after a reduction of 15%.
Work out the original price of the motorbike.



Student A Answer

$100\% - 15\% = 85\%$
so £750 is 85% of the original price

$$85\% = 750$$

$$\text{so } 1\% = \frac{750}{85}$$

$$\begin{aligned} \text{and } 100\% &= \frac{750}{85} \times 100 \\ &= 882.3529 \\ &= 882.35 \text{ (nearest penny)} \\ \text{Original price} &= \text{£}882.35 \end{aligned}$$

Student B Answer

Original cost = £750 + 15%
= 750×1.15
= 862.5
Bike was £862.50

Question 2

Work out the sale price of this suite.

Three-Piece Suite
£890
SALE
15% off marked price

Student A Answer

$$15\% \text{ of } 890 = 890 \times \frac{15}{100}$$

$$= 133.5$$

$$\text{Sale price} = \text{£}133.50$$

Student B Answer

$$\begin{aligned} \text{Discount} &= 890 \times 0.15 \\ &= 133.5 \end{aligned}$$

$$\begin{aligned} \text{Sale price} &= 890 - 133.5 \\ &= 756.5 \\ &= \text{£}756.50 \end{aligned}$$



Programme 1 Worksheet 3: Exam Practice Questions (Edexcel)

Question 1

National Curriculum Reference: N3c November 1998 Paper 3

Compact discs (CDs) are sold for £12 each.

$\frac{2}{5}$ of the £12 goes to the record company.

(a) Work out the amount of money which goes to the record company. (2 marks)

30% of the £12 goes to the shopkeeper.

(b) i) Write 30% as a decimal.
ii) Work out the amount of money which goes to the shopkeeper. (3 marks)

For each CD sold, £0.84 goes to the singer.

(c) Work out the percentage of the £12 which goes to the singer. (2 marks)

For each CD sold, £0.24 goes to the song-writer.

(d) Work out the fraction of the £12 which goes to the song-writer. (3 marks)

Give your fraction in its simplest form. [10]

Question 2

National Curriculum Reference: N3c November 1997 Paper 4

Frances sees three different advertisements for jeans.

**Bob's Cut
Price Jeans**
Normal price £30
Sale:– 15% off

Disco's Jeans
Normal price £36
SALE PRICE
 $\frac{2}{3}$ Normal Price

*Sanjay's Market Stall
Jeans*
£22 + 17.5% V.A.T.
to be added

Work out the cost of the jeans in each advertisement.

- i)** Bob's
- ii)** Disco's
- iii)** Sanjay's [6]



Programme 1 Worksheet 3: Exam Practice Questions (Edexcel)

Question 3

National Curriculum Reference: N3c June 1999 Paper 1

Sam wants to buy a Hooper washing machine.

Hooper washing machines are sold in three different shops.

WASHING POWDER
$\frac{1}{4}$ OFF usual price of £330

WHYTES
20% OFF usual price of £320

CLEAN UP
£210 plus VAT at 17½%

- (a) Work out the cost of the washing machine in the Washing Power shop.
 Washing Powder: £ _____ (2 marks)
- (b) Work out the cost of the washing machine in the Whytes shop.
 Whytes: £ _____ (2 marks)
- (c) Work out the cost of the washing machine in the Clean Up shop.
 Clean Up: £ _____ (2 marks)

[6]

Question 4

National Curriculum Reference: N3c June 1998 Paper 2

Two shops sell the same make of calculator.

At **Calculators Are Us**, the price of a calculator is £7.50 plus VAT.

At **Top Calculators**, the price is £8.75. This includes VAT.

Calculators Are Us
Model HX 130 £7.50 VAT not included

Top Calculators
Model HX 130 £8.75 VAT included

VAT is charged at a rate of 17.5%.

Work out the difference in cost between the two prices. (3 marks)

[3]



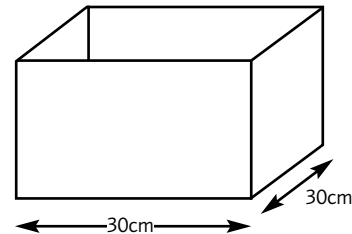
Programme 1 Worksheet 3: Exam Practice Questions (Edexcel)

Question 5

National Curriculum Reference: N2c June 1997 Paper 6

Water is stored in a tank in the shape of a cuboid with a square base. The sides of the base are 30cm long.

The depth of the water is 20cm.



- (a)** Work out the volume of the water, in cm^3 . (2 marks)

More water is put in the tank. The depth of the water rises to 21.6cm.

- (b)** Calculate the percentage increase in the volume of water in the tank. (3 marks)
[5]

Question 6

National Curriculum Reference: N3c November 1998 Paper 4

A shop has a sale of jackets and shirts.

In the sale there are a total of 120 jackets and shirts.

Shirts are to be sold at a price of £8.00 plus VAT at $17\frac{1}{2}\%$.

- (a)** What is the cost of buying one shirt, including the $17\frac{1}{2}\%$ VAT? (2 marks)

The jackets and shirts are in the ratio 5:3.

- (b)** Work out the number of jackets. (3 marks)

- (c)** Calculate the percentage that are shirts. (2 marks)
[7]



Programme 1 Worksheet 3: Exam Practice Questions (Edexcel)

Question 7

National Curriculum Reference: N3c

June 1996

Paper 1

Jugdev pays to see the Tigers.

It normally costs £2.40 but there is 20% off the price.


(a) Work out how much he pays.

Tigers



Admission £2.40
Special Offer 20% off

Cheetahs



Admission £2.70
Special Offer $\frac{1}{3}$ off

Jugdev then pays to see the Cheetahs.

It normally costs £2.70 but there is $\frac{1}{3}$ off the price.

(b) Work out how much he pays.

[3]

Question 8

National Curriculum Reference: N3d

June 1996

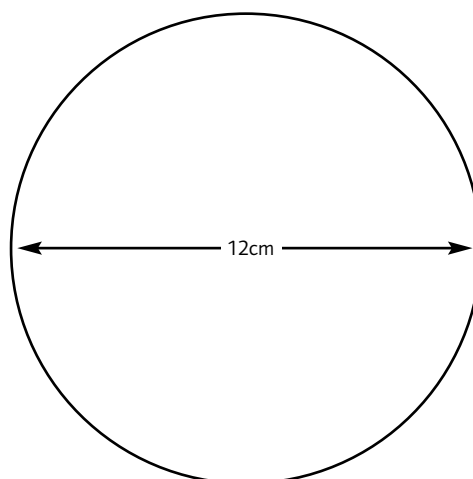
Paper 2

Some oil is spilt. The spilt oil is the shape of a circle.

The circle has a diameter of 12 centimetres.

(a) Work out the circumference, in cm, of the spilt oil.

Give your answer correct to 1 decimal place.



The diameter of the spilt oil increases by 30%.

(b) Work out the new diameter, in centimetres, of the spilt oil.

[5]



Programme 1 Worksheet 3: Exam Practice Questions (Edexcel)

Question 9

National Curriculum Reference: N4d November 1998 Paper 3

A shop is having a sale. Each day, prices are reduced by 20% of the price on the previous day. Before the start of the sale, the price of a television is £450.

On the first day of the sale, the price is reduced by 20%.

- (a)** Work out the price of the television on
- i)** the first day of the sale,
 - ii)** the third day of the sale. (5 marks)

On the first day of the sale, the price of a cooker is £300.

- (b)** Work out the price of the cooker before the start of the sale. (2 marks)
- [7]

Question 10

National Curriculum Reference: N4a June 1999 Paper 4

The cash price of the saxophone is £740.

Tom buys the saxophone using a Credit Plan.

He pays a deposit of 5% of the cash price and 12 monthly payments of £65.

Work out the difference between the cost when he used the Credit Plan and the cash price.



Saxophone
£740
 for cash
 Credit Plan
 available

[3]
 Total = 55