

Focus

Most retailers run sales promotions to encourage customers to buy their goods. They advertise special offers as a **fraction** or a **percentage off** the normal price.

10% discount if you open a store card today

PRICES SLASHED
BY 25%

1/4 off the normal price

50% OFF ALL ITEMS! Save up to ¹/₃ on normal prices

1/2 PRICE SALE

Match the price reductions that are the same.

Fraction price reductions

Fractions are written with one number above another.

These are the fractions by which prices are often reduced:

 $\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$

Percentage price reductions

Percentages are written using this symbol: %

These are the percentages by which prices are often reduced:

25% 50%

5% 10% 20%

Remember!

Price **reductions** = customer **savings**

The fraction or the percentage price reduction is what the customer **saves**.

The original price minus the price reduction is what the customer pays.



Task

Working out fraction price reductions

Step 1: Calculate what the customer saves

Divide the original price by the bottom number of the fraction. You can round the price to make the calculation easier.

For example: $\frac{1}{4}$ off £19.99

Divide £20 by 4.

 $20 \div 4 = 5$. The customer saves £5.

Step 2: Calculate what the customer pays

Subtract the saving from the original price.

For example:

The original price is £19.99.

The customer saves £5.

The customer pays £14.99. (19.99 - 5 = 14.99)

Tip

You can *round* the original price to make **step 1** easier, but use the *unrounded* original price in **step 2**.



Task 1

Price these goods ready for sale.

1	Denim Jacket PRICE CUT: ¹ / ₄ off the marked price Was: £49.99	
	Save: £	
	Pay: £	

3	Stonewash Bootleg Jeans
	Old price: £35.99 Sale offer: $\frac{1}{3}$ OFF
	Sale price: £
	Save: £

Remember!

To find the amount saved,

- Round to the nearest whole pound.
- Divide the price by the bottom number of the fraction.

2	½ price sale Mikee Air Walk Trainers
	Original price: £36.99
	Save: £

Check your answers.

You pay: £_

Remember!

The amount the customer saves and the amount the customer pays must add up to the original price.

Task

Working out percentage price reductions

25% off £19.99

Step 1: Calculate what the customer saves in a way that suits you

This may be:

- a Knowing that 50% is half (so 25% is half as much again)
- **b** Knowing that 25% is the same as $\frac{1}{4}$. The customer saves £5.

Step 2: Calculate what the customer pays:

Subtract the saving from the original price.

For example: 25% off £19.99 The original price is £19.99.

The customer saves £5.

The customer pays £14.99. (19.99 - 5 = 14.99)

Tip

You can round the original price to make step 1 easier, but use the unrounded original price in step 2.



Task 2

Price these goods ready for sale.

1 **DVD Player**

Special offer: 25% price reduction

Was: £139.99

Save: £_

You pay: £_

2 50% off

GAMES CONSOLE

Original price: £154.99

Save: £_

Pay just: £__

3 MP3 PLAYER

BONANZA PRICE CUT: Save 20%!

Old price: £179.99

Sale price: £_

An amazing saving of: £___

Tip

Find 10% first, then double your answer.

Remember!

Check your answers.

The amount the customer saves and the amount the customer pays must add up to the **original price**.



Task

Calculating retail prices

Goods are sold for profit. The store buys from a wholesaler and adds a 'mark-up' to the wholesale price. This gives a retail price (the amount the customer pays).

You can think of it like this: the customer pays 100% of the wholesale price plus the mark-up.

For example, the wholesale price for this bicycle computer is £12.69. The mark-up is 55%.

The customer will pay 155% of £12.69. (100% + 55%)

Using the calculator this is:

 $12.69 \times | 155 \div | 100$







Most stores round their prices to the nearest 99p, so the retail price is £19.99.



Task 3

Calculate the retail price for these products. Round your answers to the nearest 99p.



Remember!

The retail price is 100% of the wholesale price plus the percentage mark-up.

Item	Description	Wholesale price	Mark-up	Retail price
MX3450	Shell-safe fully vented helmet	£34.49	60%	£
DT498	Sport-ace sprint wheels	£25.99	70%	£
BZ493	Lite-source front LED lights	£12.25	25%	£
GT450	Go-tour cycle gloves	£3.45	40%	£