Money Problems & Percentage Discounts

Practice Worksheet (Foundation · Target Grade 5)

I Do

Rachel buys 3 notebooks at £2.45 each and 4 pens at £1.30 each.
She has a voucher that gives 15% off the total cost.

Work out how much Rachel pays after using the voucher.
Give your answer to the nearest penny.

£ .....

(Total for Question is 4 marks)

We Do

Arabella buys 4 folders at £1.85 each and 3 highlighters at £1.40 each.
She has a voucher that gives 20% off the total cost.

Work out how much Arabella pays after using the voucher.
Give your answer to the nearest penny.

£ .....

(Total for Question is 4 marks)

You Do 1

Paul buys 5 coffees at £3.25 each and 2 muffins at £2.15 each.
He has a loyalty card that gives 12% off the total cost.

Work out how much Paul pays after using the loyalty card.
Give your answer to the nearest penny.

£ .....

(Total for Question is 4 marks)

You Do 2

Katie buys 2 adult cinema tickets at £11.60 each and 3 child tickets at £7.45 each.
She uses a discount code that gives 18% off the total cost.

Work out how much Katie pays after using the discount code.
Give your answer to the nearest penny.

£ .....

(Total for Question is 4 marks)

You Do 3

Rob buys 3 shirts at £18.50 each and 2 ties at £9.75 each.
He has a voucher that gives 15% off the cost of the items.
After applying the voucher, he pays a delivery charge of £3.50.

Work out the total amount Rob pays.
Give your answer to the nearest penny.

£ .....

(Total for Question is 4 marks)

Challenge 1

Keeley buys 4 pairs of socks at £3.60 each and 3 T-shirts at £14.00 each.
She uses a voucher that gives 20% off the total cost.

Keeley pays with three £20 notes.

Work out how much change Keeley should receive.
Show all of your working clearly.

£ .....

(Total for Question is 4 marks)

Challenge 2

Ben buys 2 jackets at £45 each and 5 jumpers that all cost the same price.
He uses a voucher that gives 10% off his total bill.

After using the voucher, Ben pays £171 in total.

Work out the cost of one jumper before the discount.
Show all of your working clearly.

£ .....

(Total for Question is 4 marks)

Extreme Challenge

Sophie wants to buy 6 books at £8.50 each and 4 bookmarks at £1.75 each.
She compares two shops:

- **Shop A** offers 20% off the total cost of all items.
- **Shop B** has a special offer on books: *"Buy 2 books, get the 3rd book half price"* (bookmarks are full price). Sophie also has a £4.50 voucher that she can take off her final bill at Shop B.

Which shop is cheaper for Sophie, and by how much?
You must show all of your working clearly.

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(Total for Question is 5 marks)

Worked Answers

I Do (Rachel)
3 notebooks $= 3 \times$ £$2.45 =$ £7.35.
4 pens $= 4 \times$ £$1.30 =$ £5.20.
Total before discount $=$ £$7.35 +$ £$5.20 =$ £12.55.
15% off means paying 85% ($\times 0.85$):
£$12.55 \times 0.85 =$ £10.6675.
To the nearest penny: **£10.67**.

We Do (Arabella)
4 folders $= 4 \times$ £$1.85 =$ £7.40.
3 highlighters $= 3 \times$ £$1.40 =$ £4.20.
Total before discount $=$ £$7.40 +$ £$4.20 =$ £11.60.
20% off ($\times 0.80$): £$11.60 \times 0.80 =$ £**9**.**28**.

You Do 1 (Paul)
5 coffees $= 5 \times$ £$3.25 =$ £16.25.
2 muffins $= 2 \times$ £$2.15 =$ £4.30.
Total before discount $=$ £$16.25 +$ £$4.30 =$ £20.55.
12% off ($\times 0.88$): £$20.55 \times 0.88 =$ £18.084.
To the nearest penny: **£18.08**.

You Do 2 (Katie)
2 adult tickets $= 2 \times$ £$11.60 =$ £23.20.
3 child tickets $= 3 \times$ £$7.45 =$ £22.35.
Total before discount $=$ £$23.20 +$ £$22.35 =$ £45.55.
18% off ($\times 0.82$): £$45.55 \times 0.82 =$ £37.351.
To the nearest penny: **£37.35**.

You Do 3 (Rob)
3 shirts $= 3 \times$ £$18.50 =$ £55.50.
2 ties $= 2 \times$ £$9.75 =$ £19.50.
Total cost of items $=$ £$55.50 +$ £$19.50 =$ £75.00.
After 15% off: £$75.00 \times 0.85 =$ £63.75.
Add delivery charge: £$63.75 +$ £$3.50 =$ £**67**.**25**.

Challenge 1 (Keeley)
1. Cost of socks $= 4 \times$ £$3.60 =$ £14.40.
Cost of T-shirts $= 3 \times$ £$14.00 =$ £42.00.
Total before discount $=$ £$14.40 +$ £$42.00 =$ £56.40.
2. Apply 20% discount: £$56.40 \times 0.80 =$ £45.12.
3. Amount paid $= 3 \times$ £$20 =$ £60.00.
Change $=$ £$60.00 -$ £$45.12 =$ £**14.88**.

Challenge 2 (Ben)
1. After 10% off, £171 represents 90% of the original bill.
Original bill before discount $= \dfrac{\text{£}171}{0.90} =$ £190.
2. Cost of 2 jackets $= 2 \times$ £$45 =$ £90.
3. Cost of 5 jumpers $=$ £$190 -$ £$90 =$ £100.
4. Cost of 1 jumper $=$ £$100 \div 5 =$ £**20**.

Extreme Challenge (Sophie)
1. **Shop A:**
6 books $= 6 \times$ £$8.50 =$ £51.00.
4 bookmarks $= 4 \times$ £$1.75 =$ £7.00.
Total before discount $=$ £$51.00 +$ £$7.00 =$ £58.00.
After 20% off: £$58.00 \times 0.80 =$ £46.40.

2. **Shop B:**
For 6 books under *"Buy 2, get 3rd half price"*, Sophie pays full price for 4 books and half price (£4.25) for 2 books:
Books $= (4 \times$ £$8.50) + (2 \times$ £$4.25) =$ £$34.00 +$ £$8.50 =$ £42.50.
Bookmarks $=$ £7.00.
Subtotal $=$ £$42.50 +$ £$7.00 =$ £49.50.
After £4.50 voucher: £$49.50 -$ £$4.50 =$ £45.00.

3. **Comparison:**
Difference $=$ £$46.40 -$ £$45.00 =$ £1.40.
Answer: Shop B is cheaper by £1.40.