



3.12F Best Buy Questions: Foundation Tier Practice

EDEXCEL Edexcel 1MA1 · Calculator allowed · about 50 minutes

Total Marks

Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Show all your working.

- 1** A packet of 6 cereal bars costs 1.80. Work out the unit price of one cereal bar.

(Total for Question 1 is 1 mark)

- 2** Jo buys a 750 g bag of rice for 1.95. Work out the price of 100 g of rice. Give your answer in pence, correct to 1 decimal place if necessary.

(Total for Question 2 is 2 marks)

- 3** Two sizes of milk are available.
- Small: 1.2 litres for 1.08
- Large: 2 litres for 1.75
Which is the better buy? Show your working.

(Total for Question 3 is 2 marks)

- 4** A pack of 8 pens costs 3.20. A different shop sells individual pens at 0.45 each.
Which is cheaper and by how much per pen? Show working.

(Total for Question 4 is 3 marks)

- 5 A supermarket sells a 500 g jar of jam for 1.40 or a 340 g jar for 1.00.
Work out which jar is better value and show the price per 100 g for the better value jar.

(Total for Question 5 is 3 marks)

- 6 A multipack of 12 bottles of water costs 4.08. There is a special offer: buy one multipack and get a second multipack for half price.
Work out the cost per bottle if a customer buys two multipacks under this offer. Show your working.

(Total for Question 6 is 4 marks)

- 7 Maya is choosing between two offers on detergent.
- Offer A: 2 packs for 6.00
- Offer B: 3 packs for 8.25
Which offer gives the lower price per pack? Show your working and give the answer to the nearest penny.

(Total for Question 7 is 4 marks)

- 8** A shop sells biscuits in tins. The 350 g tin costs 2.20 and the 600 g tin costs 3.60.
A customer needs 1 kg of biscuits. Work out whether it is cheaper to buy two 600 g tins or three 350 g tins. Show full working and state the cheapest option with the total cost.

(Total for Question 8 is 5 marks)

- 9** A fruit juice is sold in two sizes.
- Carton A: 750 ml for 1.20
- Carton B: 1.5 litres for 2.35
A family needs 3.75 litres of juice for a party.
Calculate the least cost way to buy at least 3.75 litres. You may buy a mix of cartons. Show all working and give the total cost.

(Total for Question 9 is 6 marks)

- 10** A bakery sells muffins in boxes of 4 for 2.80 or loose at 0.80 each. There is a school event needing exactly 20 muffins.
Work out the least cost way to buy exactly 20 muffins and give the total cost. Show working.

(Total for Question 10 is 4 marks)

Mark scheme · 3.12F Best Buy Questions: Foundation Tier Practice

Question 1

- **B1** 30 pence or 0.30 cao
- **Answer: 0.30 (30p)**

Question 2

- **M1** correct method, e.g. $1.95/750 \times 100$ or $1.95 \times (100/750)$ shown
- **A1** 26.0 pence cao
- **Answer: 26.0 pence**

Question 3

- **M1** correct unit price for at least one size shown, e.g. $1.08/1.2 = 0.90$ or $1.75/2 = 0.875$
- **A1** Large is better buy with unit price 0.875 compared to 0.90 cao
- **Answer: Large, price per litre 0.875 vs 0.90 (large is cheaper)**

Question 4

- **M1** find unit price of pack: $3.20/8 = 0.40$ shown
- **M1** compare with 0.45 and find difference 0.05 shown
- **A1** Pack is cheaper by 5 pence per pen cao
- **Answer: Pack is cheaper by 0.05 (5p) per pen**

Question 5

- **M1** method for unit price for at least one jar e.g. $1.40/500 = 0.0028$ or $1.00/340 = 0.002941...$
- **M1** compare and identify better value jar (500 g is cheaper) shown
- **A1** price per 100 g for 500 g jar = 0.28 (28p) cao
- **Answer: 500 g jar is better value; 100 g costs 0.28 (28p)**

Question 6

- **M1** cost of two packs shown: $4.08 + 4.08/2 = 4.08 + 2.04 = 6.12$
- **M1** total bottles 24 identified
- **M1** method to find unit price $6.12/24$ shown
- **A1** 0.255 or 25.5 pence cao
- **Answer: 0.255 (25.5p)**

Question 7

- **M1** unit price for Offer A shown: $6.00/2 = 3.00$
- **M1** unit price for Offer B shown: $8.25/3 = 2.75$
- **M1** compare and state Offer B is cheaper
- **A1** Offer B cheaper by 0.25, price per pack 2.75 cao
- **Answer: Offer B; 2.75 per pack (cheaper by 0.25)**

Question 8

- **M1** calculate cost of 2×600 g tins = $2 \times 3.60 = 7.20$
- **M1** calculate mass of 2×600 g = 1200 g and note covers 1 kg
- **M1** calculate cost of 3×350 g tins = $3 \times 2.20 = 6.60$
- **M1** compare totals and identify cheaper option
- **A1** Three 350 g tins are cheaper; total cost 6.60 cao
- **Answer: Buy three 350 g tins; total cost 6.60 (cheaper than 7.20)**

Question 9

- **M1** convert litres to ml or convert sizes to common unit and show understanding (1.5 litres = 1500 ml, 3.75 litres = 3750 ml)
- **M1** find unit prices: $1.20/750 = 0.0016$ per ml and $2.35/1500 = 0.001566...$ per ml or equivalent per litre
- **M1** use unit prices to note carton B is cheaper per ml and attempt combinations using whole cartons that reach at least 3750 ml
- **M1** identify that 2 x Carton B (3000 ml) plus 1 x Carton A (750 ml) reaches exactly 3750 ml with no waste
- **M1** calculate total cost for chosen option: $2 \times 2.35 + 1 \times 1.20 = 4.70 + 1.20 = 5.90$, and compare against other combinations (e.g. 3 x Carton B = 7.05, 5 x Carton A = 6.00) to confirm it is cheapest
- **A1** state least cost option and total 5.90 cao
- **Answer: Buy 2 of Carton B and 1 of Carton A: total 5.90 (gives exactly 3.75 L, cheapest combination)**

Question 10

- **M1** identify that 5 boxes of 4 give 20 muffins or consider mixes
- **M1** calculate cost of 5 boxes = $5 \times 2.80 = 14.00$
- **M1** show comparison with any other reasonable option, e.g. 4 boxes + 4 loose = $4 \times 2.80 + 4 \times 0.80 = 11.20 + 3.20 = 14.40$
- **A1** state least cost is 14.00 cao
- **Answer: Buy 5 boxes of 4; total cost 14.00**