

Best Buy

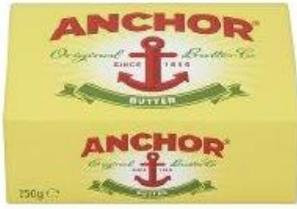
Best Buy problems can be dealt with in lots of different ways, using the idea of scaling up and down. Whenever buying twice as much costs you twice as much, you can use this idea to identify best value.

Section A:	Section B:	Section C:
Making the quantity the same	Making the price the same	Finding price per item/kg
If you buy the same amount of two different products, whichever would cost the least money is best value for money.	If you spend the same amount on two different products, whichever gets you the most stuff is best value for money.	If you convert all your prices to their cost per item or cost per kilo , etc, the lowest of these is best value for money.

Section A: Making the quantity the same

One way to compare the value for money of different products is to imagine you are buying the same quantity of each, then look for the cheapest price.

1. Sam always buys small packets, Mary buys medium and Luke buys large.

Small	Medium	Large
		
£1.60 for 250g	£2.80 for 0.5kg	£5 for 1kg

Sam says "I spend less than Mary, so I'm getting the best value for money."

Mary says "I get more butter than Sam, so I'm getting the best value."

*Neither are completely right. Sam ignored the amount & Mary ignored the price. Can you give a **short, simple explanation** that shows who is getting better value?*

2. Sam, Mary and Luke each buy 1kg of butter for the month.

How much does each one spend in total?

Sam buys _____ 250g packet(s) for £_____ each: Total cost: £_____

Mary buys _____ 500g packet(s) for £_____ each: Total cost: £_____

Luke buys _____ 1000g tub(s) for £_____ each: Total cost: £_____

The person who gets the best value for money is: _____.

Section B: Making the price the same

One way to compare the value for money of different products is to imagine you are spending the same amount, then compare the quantity you get.

1. Suzy regularly buys small chickens and Lucy regularly buys large chickens.

Small Chicken	Large Chicken
 <p data-bbox="293 725 587 766">1.5kg for £6</p>	 <p data-bbox="976 725 1286 766">2.5kg for £12</p>

One week, they both spend **exactly £12** on chicken.

What is the total amount of chicken (in kg) that each will get?

Suzy buys ____ small chicken(s) for £12. Total weight: ____ kg

Lucy buys ____ large chicken(s) for £12. Total weight: ____ kg

The size that gives the best value for money is: _____

2. The head of a school orders bananas for the staff room every Friday.

He can choose from the following options (bananas are all the same size):

Loose	Bagged	Organic
 <p data-bbox="129 1816 515 1856">8 bananas for £1</p>	 <p data-bbox="563 1816 1026 1856">12 bananas for £1.80</p>	 <p data-bbox="1058 1816 1505 1856">6 bananas for £0.80</p>

He buys 48 bananas a week. Fill in the gaps:

48 loose bananas cost: £ _____	48 bagged bananas cost: £ _____	48 organic bananas cost: £ _____
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The best value bananas are _____. The worst value bananas are _____.

Section C: Calculating the cost per kilo (or per 100g, per item, etc)

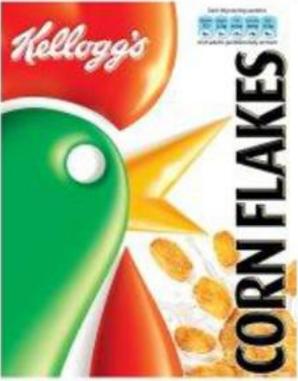
The best general method (especially for comparing lots of items) involves dividing the cost by the quantity. This tells you how much 1 item (or 1 kilo) costs.

1. Divide the cost (in pence) by the number of nappies to work out the cost per nappy for each of these three options, and decide which is the cheapest:

Asda	Amazon	Boots
		
23 nappies for £4.00	174 nappies for £20.06	16 nappies for £2.74
___ pence per nappy	___ pence per nappy	___ pence per nappy

The best value nappies are _____ at a cost of _____ pence per nappy.

2. Calculate the **cost per 100g** for each of the packets of cornflakes below. Divide the cost (in pence) by the number of grams, then \times by 100 to give the pence per 100g. Round your answers to 1 d.p. The first one is done for you.

Tiny	Small	Medium	Large
			
£1.59 for 250g	£1.98 for 0.5kg	£2.40 for 0.75kg	£3.29 for 1kg

Tiny: 159p for 250g \Rightarrow pence per gram: $159 \div 250 = 0.636$
 $0.636 \times 100 = 63.6p$ per 100g

Small:

Medium:

Large:

Best value for money is: _____ at a cost of _____ pence per 100g.

Best Buy SOLUTIONS

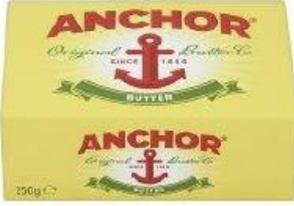
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Section A: Making the quantity the same

One way to compare the value for money of different products is to imagine you are buying the same quantity of each, then look for the cheapest price.

1. Sam always buys small packets, Mary buys medium and Luke buys large.

Small	Medium	Large
		
£1.60 for 250g	£2.80 for 0.5kg	£5 for 1kg

Sam says "I spend less than Mary, so I'm getting the best value for money."

Mary says "I get more butter than Sam, so I'm getting the best value."

Neither are completely right. Sam ignored the amount & Mary ignored the price.

Can you give a **short, simple explanation** that shows who is getting better value?

If they both bought 0.5kg, Sam would need 2 packets at £3.20 (more than Mary).

2. Sam, Mary and Luke each buy 1kg of butter for the month.

How much does each one spend in total?

Sam buys **four** 250g packet(s) for **£1.60** each:

Total cost: **£6.40**

Mary buys **two** 500g packet(s) for **£2.80** each:

Total cost: **£5.60**

Luke buys **one** 1000g tub(s) for **£5.00** each:

Total cost: **£5.00**

The person who gets the best value for money is: **Luke**.

Section B: Making the price the same

One way to compare the value for money of different products is to imagine you are spending the same amount, then compare the quantity you get.

1. Suzy regularly buys small chickens and Lucy regularly buys large chickens.

Small Chicken	Large Chicken
	
1.5kg for £6	2.5kg for £12

One week, they both spend **exactly £12** on chicken.

What is the total amount of chicken (in kg) that each will get?

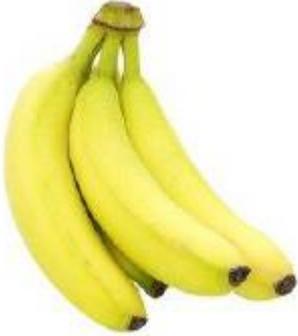
Suzy buys **two** small chicken(s) for £12. Total weight: **3kg**

Lucy buys **one** large chicken(s) for £12. Total weight: **2.5kg**

The size that gives the best value for money is: **Small**.

2. The head of a school orders bananas for the staff room every Friday.

He can choose from the following options (bananas are all the same size):

Loose	Bagged	Organic
		
8 bananas for £1	12 bananas for £1.80	6 bananas for £0.80

He buys 48 bananas a week. Fill in the gaps:

48 loose bananas cost: £6.00	48 bagged bananas cost: £7.20	48 organic bananas cost: £6.40
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The best value bananas are **Loose**. The worst value bananas are **Bagged**.

Section C: Calculating the cost per kilo (or per 100g, per item, etc)

The best general method (especially for comparing lots of items) involves dividing the cost by the quantity. This tells you how much 1 item (or 1 kilo) costs.

1. Divide the cost (in pence) by the number of nappies to work out the cost per nappy for each of these three options, and decide which is the cheapest:

Asda	Amazon	Boots
		
23 nappies for £4.00	174 nappies for £20.06	16 nappies for £2.74

17.4 pence per nappy 11.5 pence per nappy 17.1 pence per nappy

The best value nappies are Amazon at a cost of 11.5 pence per nappy.

2. Calculate the **cost per 100g** for each of the packets of cornflakes below. Divide the cost (in pence) by the number of grams, then \times by 100 to give the pence per 100g. Round your answers to 1 d.p. The first one is done for you.

Tiny	Small	Medium	Large
			
£1.59 for 250g	£1.98 for 0.5kg	£2.40 for 0.75kg	£3.29 for 1kg

Tiny: 159p for 250g \Rightarrow pence per gram: $159 \div 250 = 0.636$
 $0.636 \times 100 = 63.6p$ per 100g

Small: 198p for 500g \Rightarrow pence per gram: $198 \div 500 = 0.396$
 $0.396 \times 100 = 39.6p$ per 100g

Medium: 240p for 750g \Rightarrow pence per gram: $240 \div 750 = 0.32$
 $0.32 \times 100 = 32p$ per 100g

Large: 329p for 1000g \Rightarrow pence per gram: $329 \div 1000 = 0.329$
 $0.329 \times 100 = 32.9p$ per 100g

Best value for money is: Medium at a cost of 32 pence per 100g.