

Best Buys - Worksheet

Skill

Group A - Unitary method/Common multiples

Which offer is better value for money? Use either the unitary method or the common multiples method.

1) Offer A

6 mugs for £18

Offer B

3 mugs for £12

2) Offer A

8 pictures for £40

Offer B

6 pictures for £36

3) Offer A

6 games for £54

Offer B

4 games for £32

4) Offer A

3 pens for £7.50

Offer B

5 pens for £12

5) Offer A

4 books for £18

Offer B

3 books for £12.75

6) Offer A

3 drinks for £11.70

Offer B

7 drinks for £23.80

7) Offer A

5 bags for £26

Offer B

10 bags for £53

Offer C

20 bags for £102

8) Offer A

2 boxes for £1.60

Offer B

3 boxes for £2.55

Offer C

6 boxes for £4.92

9) Offer A

3 jumpers for £75

Offer B

4 jumpers for £104

Offer C

6 jumpers for £156

10) Offer A

300ml for £12

Offer B

600ml for £20

11) Offer A

9kg for £13.50

Offer B

3kg for £4.20

12) Offer A

500cm for £3

Offer B

2m for £7.20

Best Buys - Worksheet

Group B - Exchange rates

Where is it cheaper to buy the items?

1) Exchange rate: £1 = \$1.30.

A jumper costs £20 in the UK. The same jumper costs \$25 in the USA.

3) Exchange rate: £1 = 150 yen.

A set of headphones costs £30 in the UK. The same headphones cost 4600 yen in Japan.

5) Exchange rate: £1 = \$1.35

A bag costs £40 in the UK. The same jumper costs \$70 in the USA.

7) Exchange rates:

£1 = \$1.30 and £1 = €1.20

A phone costs £300 in the UK. The same phone costs \$400 in the USA and €350 in France.

9) Exchange rates:

£1 = \$1.30 and £1 = 99 rupees.

A rug costs £101 in the UK. The same rug costs \$150 in the USA and 9990 rupees in India.

11) Exchange rates:

£1 = \$1.35 and \$1 = €0.90

A TV costs £600 in the UK. The same TV costs \$750 in the USA and €700 in Spain.

2) Exchange rate: £1 = €1.20.

A pair of trainers costs £40 in the UK. The same pair of trainers costs €45 in France.

4) Exchange rate: £1 = €1.40.

A laptop costs £300 in the UK. The same laptop costs €410 in Spain.

6) Exchange rate: £1 = 20.5 rand.

A coat costs £60 in the UK. The same coat costs 1200 rand in South Africa.

8) Exchange rates:

£1 = \$1.25 and £1 = €1.18

A necklace costs £200 in the UK. The same necklace costs \$240 in the USA and €220 in Spain.

10) Exchange rates:

£1 = €1.20 and €1 = \$1.15

An ornament costs £70 in the UK. The same ornament costs €80 in France and \$90 in the USA.

12) Exchange rates:

£1 = \$1.25 and \$1 = 5.5 Real.

A jumper costs £22 in the UK. The same jumper costs \$30 in the USA and 150 Real in Brazil.

Best Buys - Worksheet

Group C - Deals

Janet wants to buy some cola. What is the cost per litre using each deal?

1) 1l bottle = 60p

Buy 1 get 1 free

2) 1l bottle = 60p

Buy 2 get the 3rd free

3) 2l bottle = 80p

Buy 4 get the 5th free

4) 800ml bottle = 40p

Buy 2 get the 3rd free

5) 1l bottle = 50p

20% off total price

6) 2l bottle = £1

25% off total price

7) 800ml bottle = 50p

20% off total price

8) 300ml bottle = 20p

10% off total price

9) 1l bottle = 40p

10% extra free

10) 2l bottle = 95p

10% extra free

11) 500ml bottle = 30p

25% extra free

12) 600ml bottle = 40p

15% extra free

Best Buys - Worksheet

Applied

- 1) (a) Josie needs to buy toilet rolls and kitchen rolls.

Buy for less are selling a bundle which includes 12 toilet rolls and 4 kitchen rolls for £6.80.

They are also selling toilet rolls in packs of 4 for £1.80 and kitchen rolls in packs of 2 for 90p.

Is it better to buy the bundle or individual packs?

- (b) Josie needs 20 toilet rolls and 8 kitchen rolls. What is the least she could pay?

- 2) Mary has £12 to spend on chocolate bars. She can go to two different shops.

Chocoholics

£5 per bar

Buy one get one free

Sweet Sensations

£3 per bar

3 for 2

In which shop will Mary be able to buy the most chocolate bars?

- 3) A carton of juice usually contains 500ml. Here are two options for special offers:

Offer 1 20% off usual price Same amount of juice	Offer 2 20% extra juice Price remains the same
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Which is a better offer for the customer?

- 4) The M6 toll road in England is 27mi in length. It costs £7 for a car to travel along this road.

The A23 toll road in France is 98km. It costs €22.10 for a car to travel along this road.

Given that £1 = €1.20, which road is better value to travel along?

Best Buys - Exam Questions

- 1) Washing powder is sold in 3 different sizes of container.
A $3kg$ container costs £5.40
A $5kg$ container costs £8
A $7kg$ container costs £13.30

Which size of container is the best value for money?
You must show how you got your answer.

.....
(3 marks)

- 2) Sarah is buying shampoo. She needs to choose between two brands and wants to buy the shampoo that is better value for money.

Silky Smooth
 $400ml$
£3.60

Crisp and Clean
 $300ml$
£3

Which shampoo is better value for money?

.....
(2)

Silky Smooth is available in the USA for \$4.50 per bottle. Given that $£1 = \$1.35$, in which country is Silky Smooth better value for money?

.....
(2)
(4 marks)

Best Buys - Exam Questions

- 3) A multipack of crisps usually contains 12 packets of crisps and is sold for £3. The crisp manufacturers consider two different offers:

Offer 1: 50% extra free	Offer 2: Buy one multipack, get the second half price
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Which of these offers is better value? Show how you decide.

.....
(5 marks)

Best Buys - Answers

	Question	Answer
	Skill Questions	
Group A	<p>Work out:</p> <p>1) Offer A 6 mugs for £18 Offer B 5 mugs for £17.50</p> <p>2) Offer A 8 pictures for £40 Offer B 6 pictures for £36</p> <p>3) Offer A 6 games for £54 Offer B 4 games for £32</p> <p>4) Offer A 3 pens for £7.50 Offer B 5 pens for £12</p> <p>5) Offer A 4 books for £18 Offer B 3 books for £12.75</p> <p>6) Offer A 3 drinks for £11.70 Offer B 7 drinks for £23.80</p> <p>7) Offer A 5 bags for £26 Offer B 10 bags for £53 Offer C 20 bags for £102</p> <p>8) Offer A 2 boxes for £1.60 Offer B 3 boxes for £2.55 Offer C 6 boxes for £4.92</p> <p>9) Offer A 3 jumpers for £75 Offer B 4 jumpers for £104 Offer C 6 jumpers for £156</p> <p>10) Offer A 300ml for £12 Offer B 600ml for £20</p> <p>11) Offer A 9kg for £13.50 Offer B 3kg for £4.20</p> <p>12) Offer A 500cm for £3 Offer B 2 metres for £7.20</p>	<p>1) A</p> <p>2) A</p> <p>3) B</p> <p>4) B</p> <p>5) B</p> <p>6) B</p> <p>7) C</p> <p>8) A</p> <p>9) A</p> <p>10) B</p> <p>11) B</p> <p>12) A</p>

Best Buys - Answers

Group B	<p>Where is it cheaper to buy the items?</p> <p>1) The exchange rate is £1 = \$1.30.</p> <p>A jumper costs £20 in the UK. The same jumper costs \$25 in the USA.</p> <p>2) The exchange rate is £1 = €1.20.</p> <p>A pair of trainers costs £40 in the UK. The same pair of trainers costs €45 in France.</p> <p>3) The exchange rate is £1 = 150 yen.</p> <p>A set of headphones costs £30 in the UK. The same headphones cost 4600 yen in Japan.</p> <p>4) The exchange rate is £1 = €1.40.</p> <p>A laptop costs £300 in the UK. The same laptop costs €410 in Spain.</p> <p>5) The exchange rate is £1 = \$1.35.</p> <p>A bag costs £40 in the UK. The same jumper costs \$70 in the USA.</p> <p>6) The exchange rate is £1 = 20.5 rand.</p> <p>A coat costs £60 in the UK. The same coat costs 1200 rand in South Africa</p> <p>7) The exchange rates are £1 = \$1.30 and £1 = €1.20.</p> <p>A phone costs £300 in the UK. The same phone costs \$400 in the USA and €350 in France.</p>	<p>1) UK: \$26 Cheaper in the USA</p> <p>2) UK: €48 Cheaper in France</p> <p>3) UK: 4500 yen Cheaper in the UK</p> <p>4) UK: €420 Cheaper in Spain</p> <p>5) UK: \$54 Cheaper in the UK</p> <p>6) UK: 1230 Rand Cheaper in South Africa</p> <p>7) USA: £307.69 France: £291.67 Cheapest in France</p>
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Best Buys - Answers

<p>Group B</p>	<p>8) The exchange rates are $\text{£}1 = \\$1.25$ and $\text{£}1 = \text{€}1.18$.</p> <p>A necklace costs $\text{£}200$ in the UK. The same necklace costs $\\$240$ in the USA and $\text{€}220$ in Spain.</p> <p>9) The exchange rates are $\text{£}1 = \\$1.30$ and $\text{£}1 = 99$ rupees.</p> <p>A rug costs $\text{£}101$ in the UK. The same rug costs $\\$150$ in the USA and 9990 rupees in India.</p> <p>10) The exchange rates are $\text{£}1 = \text{€}1.20$ and $\text{€}1 = \\$1.15$.</p> <p>An ornament costs $\text{£}70$ in the UK. The same ornament costs $\text{€}80$ in France and $\\$90$ in the USA.</p> <p>11) The exchange rates are $\text{£}1 = \\$1.35$ and $\\$1 = \text{€}0.90$.</p> <p>A TV costs $\text{£}600$ in the UK. The same TV costs $\\$750$ in the USA and $\text{€}700$ in Spain.</p> <p>12) The exchange rates are $\text{£}1 = \\$1.25$ and $\\$1 = 5.5$ Real.</p> <p>A jumper costs $\text{£}22$ in the UK. The same jumper costs $\\$30$ in the USA and 150 Real in Brazil.</p>	<p>8) USA: $\text{£}192$ Spain: $\text{£}186.44$ Cheapest in Spain</p> <p>9) USA: $\text{£}115.38$ India: $\text{£}100.91$ Cheapest in India</p> <p>10) UK: $\text{€}84$ USA: $\text{€}78.26$ Cheapest in the USA</p> <p>11) UK: $\\$810$ Spain: $\\$777.78$ Cheaper in the USA</p> <p>12) UK: $\\$27.50$ Brazil: $\\$27.27$ Cheapest in Brazil</p>
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Best Buys - Answers

Group C	<p>Janet wants to buy some cola. What is the cost per litre using each deal?</p> <p>1) 1l bottle = 60p. Buy 1 get 1 free</p> <p>2) 1l bottle = 60p. Buy 2 get the 3rd free</p> <p>3) 2l bottle = 80p. Buy 4 get the 5th free</p> <p>4) 800ml bottle = 40p. Buy 2 get the 3rd free</p> <p>5) 1l bottle = 50p. 20% off total price</p> <p>6) 2l bottle = £1. 25% off total price</p> <p>7) 800ml bottle = 50p. 20% off total price</p> <p>8) 300ml bottle = 20p. 10% off total price</p> <p>9) 1l bottle = 40p. 10% extra free</p> <p>10) 2l bottle = 95p. 10% extra free</p> <p>11) 500ml bottle = 30p. 25% extra free</p> <p>12) 600ml bottle = 40p. 15% extra free</p>	<p>1) 30p</p> <p>2) 40p</p> <p>3) 32p</p> <p>4) 33.33p</p> <p>5) 40p</p> <p>6) 37.5p</p> <p>7) 50p</p> <p>8) 60p</p> <p>9) 36.36p</p> <p>10) 43.18p</p> <p>11) 48p</p> <p>12) 57.97p</p>
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Best Buys - Answers

	Question	Answer		
	Applied Questions			
1)	<p>a) Josie needs to buy toilet rolls and kitchen rolls. Buy for less are selling a bundle which includes 12 toilet rolls and 4 kitchen rolls for £6. 80. They are also selling toilet rolls in packs of 4 for £1. 80 and kitchen rolls in packs of 2 for 90<i>p</i>. Is it better to buy the bundle or individual packs?</p> <p>b) Josie needs 20 toilet rolls and 8 kitchen rolls. What is the least she could pay?</p>	<p>a) Bundle</p> <p>b) 1 bundle = £6. 80 2 packs toilet roll = £3. 60 2 packs kitchen roll = £1. 80 Total = £12. 20</p>		
2)	<p>Mary has £12 to spend on chocolate bars. She can go to two different shops.</p> <table><tr><td>Chocoholics £5 per bar Buy one get one free</td><td>Sweet Sensations £3 per bar 3 for 2</td></tr></table> <p>In which shop will Mary be able to buy the most chocolate bars?</p>	Chocoholics £5 per bar Buy one get one free	Sweet Sensations £3 per bar 3 for 2	Sweet sensations
Chocoholics £5 per bar Buy one get one free	Sweet Sensations £3 per bar 3 for 2			
3)	<p>A carton of juice usually contains 500<i>ml</i>. Here are two options for special offers:</p> <table><tr><td>Offer 1 20% off usual price Same amount of juice</td><td>Offer 2 20% extra juice Price remains the same</td></tr></table> <p>Which is a better offer for the customer? Show how you decide.</p>	Offer 1 20% off usual price Same amount of juice	Offer 2 20% extra juice Price remains the same	<p>Offer 1: 20% off the price</p> <div><p>Price decreased by 20% = 500<i>ml</i> 80% price = 500<i>ml</i> 16% price = 100<i>ml</i> $\div 5$</p><p>Original price = 500<i>ml</i> + 20% Original price = 600<i>ml</i> 1/6 price = 600<i>ml</i> $\div 6$ 16.67% price = 100<i>ml</i></p></div>
Offer 1 20% off usual price Same amount of juice	Offer 2 20% extra juice Price remains the same			
4)	<p>The M6 toll road in England is 27 miles in length. It costs £7 for a car to travel along this road. The A23 toll road in France is 98<i>km</i>. It costs €22. 10 for a car to travel along this road. Given that £1 = €1. 20, which road is better value to travel along?</p>	<p><u>M6 in England</u>: £0. 259 / mile <u>A23 in France</u>: £0. 301 / mile So M6 toll in England is better value</p>		

Best Buys - Mark Scheme

	Question	Answer							
	Exam Questions								
1)	<p>Washing powder is sold in 3 different sizes of container.</p> <p>A 3kg container costs £5. 40 A 5kg container costs £8 A 7kg container costs £13. 30</p> <p>Which size of container is the best value for money?</p> <p>You must show how you got your answer.</p>	<p>3kg container: 1kg = £1. 80 5kg container: 1kg = £1. 60 7kg container: 1kg = £1. 90</p> <p>Calculates the value of two containers with a comparable unit.</p> <p>Calculates the value of all three containers with comparable units.</p> <p>5kg container is better value for money.</p>	<p>(1)</p> <p>(1)</p> <p>(1)</p>						
2) a)	<p>Sarah is buying shampoo. She needs to choose between two brands and wants to buy the shampoo that is better value for money.</p> <table><tr><td>Silky Smooth</td><td>Crisp and Clean</td></tr><tr><td>400ml</td><td>300ml</td></tr><tr><td>£3. 60</td><td>£3</td></tr></table> <p>Which shampoo is better value for money?</p>	Silky Smooth	Crisp and Clean	400ml	300ml	£3. 60	£3	<p>Silky smooth: 100ml = £0. 90</p> <p>Crisp and clean: 100ml = £1</p> <p>Silky Smooth better value</p>	<p>(1)</p> <p>(1)</p>
Silky Smooth	Crisp and Clean								
400ml	300ml								
£3. 60	£3								
b)	<p>Silky Smooth is available in the USA for \$4. 50 per bottle. Given that £1 = \$1. 35, in which country is Silky Smooth better value for money?</p>	<p>£3. 60 × 1. 35 = \$4. 86 or 4. 50 ÷ 1. 35 = £3. 33</p> <p>Better value in the USA</p>	<p>(1)</p> <p>(1)</p>						

Best Buys - Mark Scheme

<div>3)</div>	<div>A multipack of crisps usually contains 12 packets of crisps and is sold for £3.</div> <div>The crisp manufacturers consider two different offers:</div> <div><table><tr><td>Offer 1:</td><td>Offer 2:</td></tr><tr><td>50% extra free</td><td>Buy one multipack, get the second half price</td></tr></table></div> <div>Which of these offers is better value? Show how you decide.</div>	Offer 1:	Offer 2:	50% extra free	Buy one multipack, get the second half price	<div>Offer 1: 18 packs for £3 1 pack = 16.67p</div> <div>Offer 2: 24 packs for £4.50 1 pack = 18.75p</div> <div>Offer 1 is better</div>	<div>(1)</div> <div>(1)</div> <div>(1)</div> <div>(1)</div> <div>(1)</div>
Offer 1:	Offer 2:						
50% extra free	Buy one multipack, get the second half price						

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