

VALUE FOR MONEY - PRACTICE QUESTIONS



metatutor

1.

Shop A sells eggs in packs of 6 for £2.40.

Shop B sells eggs in packs of 8 for £4.00.

Which shop gives best value for money?

$$A = 2.40 \div 6 = \text{£}0.40 \text{ per egg}$$

$$B = 4.00 \div 8 = \text{£}0.50 \text{ per egg}$$

Shop A gives best value for money.

2.

A shop sells crisps in three different sized multipacks.

The first multipack contains 6 bags of crisps and costs £1.80.

The second multipack contains 15 bags of crisps and costs £4.50.

The third multipack contains 24 bags of crisps and costs £6.00.

Which multipack gives best value for money?

$$\text{Multipack 1} = 1.80 \div 6 = \text{£}0.30 \text{ per bag}$$

$$\text{Multipack 2} = 4.50 \div 15 = \text{£}0.30 \text{ per bag}$$

$$\text{Multipack 3} = 6.00 \div 24 = \text{£}0.25 \text{ per bag}$$

Multipack 3 gives best value for money.

3.

A supermarket sells rice in three different sized packets - small, medium and large.

The small packets contain 100g of rice and cost £1.20.

The medium packets contain 250g of rice and cost £2.50.

The large packets contain 1kg of rice and cost £5.00.

Which sized packet gives best value for money?

$$\text{Small} = 1.20 \div 100 = \text{£}0.012 \text{ per gram}$$

$$\text{Medium} = 2.50 \div 250 = \text{£}0.01 \text{ per gram}$$

$$\text{Large} = 5.00 \div 1000 = \text{£}0.005 \text{ per gram}$$

The large packet gives best value for money.

4.

Lemonade is sold in cans and bottles.

The cans contain 550ml of lemonade and cost 80p.

The bottles contain one and a half litres of lemonade and cost £3.50.

Which gives best value for money – cans or bottles?

$$\text{Cans} = 0.80 \div 550 = 0.00145 \text{ per ml}$$

$$\text{Bottles} = 3.50 \div 1500 = 0.0023 \text{ per ml}$$

Cans give the best value for money.

5.

A shop sells string in three different lengths.

It sells 150cm of string for £1.50, 5 metres of string for £3.50 and 10 metres of string for £8.50.

Which length of string provides best value for money?

$$150\text{cm} = 1.50 \div 150 = 0.01 \text{ per cm}$$

$$5\text{m} = 3.50 \div 500 = 0.007 \text{ per cm}$$

$$10\text{m} = 8.50 \div 1000 = 0.0085 \text{ per cm.}$$

10 metres provide best value for money.

6.

A shop sells bottles of water in different quantities.

One bottle of water costs 79p.

A pack of 4 bottles of water costs £3.10.

A pack of 12 bottles of water costs £9.50.

Which sized pack provides best value for money?

$$\text{One bottle} = 0.79 \div 1 = 0.79 \text{ per bottle.}$$

$$4 \text{ pack} = 3.10 \div 4 = 0.775 \text{ per bottle.}$$

$$12 \text{ pack} = 9.50 \div 12 = 0.7916 \text{ per bottle.}$$

The pack of 4 gives best value for money.

7.

A shop sells macaroni in three different sized packs.

Pack 1 contains 600g of macaroni and costs £1.40.

Pack 2 contains 1.5kg of macaroni and costs £4.20.

Pack 3 contains 2.5kg of macaroni and costs £6.

Which pack provides best value for money?

$$\text{Pack 1} = 1.40 \div 600 = 0.0023 \text{ per gram}$$

$$\text{Pack 2} = 4.20 \div 1500 = 0.0028 \text{ per gram}$$

$$\text{Pack 3} = 6.00 \div 2500 = 0.0024 \text{ per gram}$$

Pack 1 provides best value for money.

8.

A garden centre sells tomato seeds in three different sized packs.

Pack 1 contains 25 seeds and costs £1.19.

Pack 2 contains 60 seeds and costs £2.99.

Pack 3 contains 100 seeds and costs £4.99.

Which pack provides best value for money?

$$\text{Pack 1} = 1.19 \div 25 = 0.0476 \text{ per seed}$$

$$\text{Pack 2} = 2.99 \div 60 = 0.04983 \text{ per seed}$$

$$\text{Pack 3} = 4.99 \div 100 = 0.0499 \text{ per seed}$$

Pack 1 provides best value for money.

9.

Shop A sells dog food in a pack of six 350g tins for £3.75.

Shop B sells dog food in a pack of eight 275g tins for £4.

Which shop provides best value for money?

$$\text{Shop A: } 350 \times 6 = 2100$$
$$3.75 \div 2100 = 0.00178... \text{ per gram}$$

$$\text{Shop B: } 275 \times 8 = 2200$$
$$4.00 \div 2200 = 0.0018 \text{ per gram}$$

Shop A provides best value for money.

10.

Brand A sells custard in packs of eight 120g pots for £3.59.

Brand B sells custard in packs of ten 100g pots for £4.49.

Brand C sells custard in 750g cartons for £2.79 each.

Which brand provides best value for money?

$$A: 8 \times 120 = 960, 3.59 \div 960 = 0.003739583 \text{ per gram}$$

$$B: 10 \times 100 = 1000, 4.49 \div 1000 = 0.00449 \text{ per gram}$$

$$C: 2.79 \div 750 = 0.00372 \text{ per gram}$$

Brand C provides best value for money.

11.

Brand A sells cat food in a box of twelve 100g sachets for £4.75.

Brand B sells cat food in a pack of six 325g tins for £7.75.

Brand C sells cat food in a pack of eight 300g tins for £8.75.

Which brand provides best value for money?

$$A: 12 \times 100 = 1200, 4.75 \div 1200 = 0.0039583 \text{ per gram}$$

$$B: 6 \times 325 = 1950, 7.75 \div 1950 = 0.003974358 \text{ per gram}$$

$$C: 8 \times 300 = 2400, 8.75 \div 2400 = 0.00364583 \text{ per gram}$$

Brand C provides best value for money.

12.

A shop sells cotton rolls in two different sizes.

Roll 1 is 80 centimetres wide, 8 metres long and costs £12.50.

Roll 2 is 90 centimetres wide, 9 metres long and costs £15.50.

Which roll provides best value for money?

$$\text{Roll 1: Area} = 80 \times 800 = 64000 \text{ cm}^2$$

$$12.50 \div 64000 = 0.0001953125 \text{ per cm}^2$$

$$\text{Roll 2: Area} = 90 \times 900 = 81000 \text{ cm}^2$$

$$15.50 \div 81000 = 0.0001913580246 \text{ per cm}^2$$

Roll 2 provides best value for money.