

Identifying prices in direct proportion - answers

The amounts in questions 3, 4 and 6 are in direct proportion. Explanations are given below:

1. Emulsion paint at £7.99 for 2.5 litres and £14.99 for 5 litres.

Correct answer: **these prices aren't in direct proportion. The amount of paint has doubled, but the price hasn't.**

2. Storage boxes at £2.99 each and 2 for £5.

Correct answer: **the number of boxes has doubled but the price hasn't.**

3. 5 packs of ceramic wall tiles for £50 and 3 packs for £30.

Correct answer: **the price of a pack stays the same whether you buy 3 packs or 5 packs, so the price is directly proportional to the number of items.**

4. 1 loaf of bread for 75p and 4 loaves for £3.

Correct answer: **the price of a loaf stays the same whether you buy 1 loaf or 4 loaves, so the price is directly proportional to the number of items.**

5. 50 g of chocolate for 40p and 200 g of chocolate for £1.20.

Correct answer: **the number of grams is 4 times as much ($50 \text{ g} \times 4 = 200 \text{ g}$) but the price is only 3 times as much ($3 \times 40\text{p} = \text{£}1.20$). So they are not in direct proportion.**

6. A pack of 20 nappies for £2 and a pack of 28 nappies for £2.80.

Correct answer: **the price per nappy is the same in both packs: 10p. So the price is directly proportional to the number of items.**