

# Direct Proportion

Practice worksheet · KS3

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. 5 pens cost 10 pounds. What does 1 pen cost, in pounds?

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2. 4 apples cost 120 pence. What does 1 apple cost, in pence?

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3. 6 identical books cost 42 pounds. What does 1 book cost, in pounds?

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4. 8 tickets cost 96 pounds. What does 1 ticket cost, in pounds?

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5. 3 cakes cost 6 pounds. What do 7 cakes cost, in pounds?

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6. 5 pens cost 10 pounds. What do 8 pens cost, in pounds?

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7. 4 burgers cost 12 pounds. What do 9 burgers cost, in pounds?

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8. 6 chairs cost 54 pounds. What do 10 chairs cost, in pounds?

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9. A car travels 150 kilometres on 10 litres of fuel. How far does it travel on 4 litres?

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10. A tap fills 60 litres in 5 minutes. How many litres does it fill in 8 minutes?

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11. A printer prints 120 pages in 4 minutes. How many pages does it print in 7 minutes?

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12. 4 identical parcels weigh 20 kilograms altogether. What do 7 of the same parcels weigh, in kilograms?

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13. A recipe for 4 people uses 320 grams of rice. How many grams of rice are needed for 6 people?

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14. A pack of 3 bars costs 240 pence. A pack of 5 bars costs 350 pence. Which pack is better value?

stretch

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15. A 4-pack of juice costs 500 pence. A 6-pack costs 900 pence. Which pack is better value?

stretch

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16. 2 kilograms of rice costs 300 pence. 5 kilograms costs 700 pence. Which is better value?

stretch

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# Answers

Direct proportion

1.  $10 / 5 = 2 = 2$
2.  $120 / 4 = 30 = 30$
3.  $42 / 6 = 7 = 7$
4.  $96 / 8 = 12 = 12$
5.  $6 / 3 = 2$ , then  $2 \times 7 = 14$
6.  $10 / 5 = 2$ , then  $2 \times 8 = 16$
7.  $12 / 4 = 3$ , then  $3 \times 9 = 27$
8.  $54 / 6 = 9$ , then  $9 \times 10 = 90$
9.  $150 / 10 = 15$ , then  $15 \times 4 = 60$
10.  $60 / 5 = 12$ , then  $12 \times 8 = 96$
11.  $120 / 4 = 30$ , then  $30 \times 7 = 210$
12.  $20 / 4 = 5$ , then  $5 \times 7 = 35$
13.  $320 / 4 = 80$ , then  $80 \times 6 = 480$
14.  $240 / 3 = 80$  p a bar,  $350 / 5 = 70$  p a bar = the pack of 5
15.  $500 / 4 = 125$  p each,  $900 / 6 = 150$  p each = the 4-pack
16.  $300 / 2 = 150$  p a kilogram,  $700 / 5 = 140$  p a kilogram = the 5 kilograms