Direct Proportion

Practice worksheet · KS3

Name: _____ Date: _____

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

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

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

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

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

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

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

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

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

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

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

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

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

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

★ stretch

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

★ stretch

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

★ stretch

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