Proportion Worksheet.

1. The cost of 8 books is \pounds 96.80. Find the cost of 7 books.

2. Nine sheets of high gloss photo paper costs \pm 7.29. How much would it cost for 10 sheets?

3. On holiday, I exchanged £40 for \$72. How many dollars would I have got for £45? (Find how much for £1 first)

4. It takes a man 2 minutes to paint a wall panel with an area of 3000cm². What area of wall could the man paint in 9 minutes?

5. A machine wheel turns 300 times in 4 minutes. How many turns would it make in 5 minutes?

6. 5 air mail letters cost $\pounds 2$ to post. How much would it cost to post 6 letters?

7. A machine makes 300 paperclips every 6 seconds. How many paperclips will it make in:

a) 1 second. b) 7 seconds. c) one minute d) an hour

8. A computer programmer writes 30 lines of computer code in an hour.

a) How long would it take to write 26 lines of code?

b) A complete programme took 1 hour and 48 minutes to write. How many lines of code were in this programme?

9. 400 pencils cost ± 8 . Find the cost of 300 pencils. (Find the cost of 100 first).

10. The cost of painting is directly proportional to the area being painted.

a) A wall 12 metres by 2 metres costs £72 to paint. How much would it cost for a wall 15 metres by 2 metres?

b) A factory panel (25 metres by 8 metres) costs \pm 160 to paint. How much would it cost to paint a 30 metres by 5 metres panel?

11. If it takes 5 men 12 hours to paint a fence, how long would it take 6 men?

12. If it takes 6 men 8 hours to erect a fence, how long would it take 5 men to erect the fence?

13. An aeroplane takes 5 hours for a journey at an average speed of 240km/hr. At what speed would the aeroplane have to travel to cover the same journey in 3 hours.

14. Terri reads at a rate of 250 words per minute and takes 6 hours to read a book. How long would it take her to read the book at 300 words per minute?

15. A squad of five soldiers have enough rations for 12 days. Ten other soldiers with no extra food join the squad. How many days will the rations now last the group?

16. Jason has enough fish food to feed his 20 tropical fish for 3 weeks. If he sells 5 of his fish, how long will the fish food last?

17. An architect estimated it would take 15 men 10 months to build a block of flats. The builder needs to do the job in 6 months. How many **extra** men does the builder need to complete the job on time?

Proportion Answers.

- 1. £84.60
- 2. £8.10
- 3. \$81
- 4. 13,500cm²
- 5. 375
- 6. a) £2.40 b) £9.10
- 7. a) 50 b) 350 c) 3000 d) 180,000
- 8. a) 52 minutes b) 54
- 9. £6
- 10. a) £90.00 b) £120
- 11. 10 hours
- 12.9.6 hours (or 9 hours 36 mins)
- 13.400km/hr
- 14.5 hours
- 15.4 days
- 16.4 weeks
- 17.10 more men