Proportion (Direct & Inverse)

Mixed Exercise

** You need a calculator for this worksheet.



- In 5 hours an electric fire uses 20 units of electricity. How many umits will it use in:
 - (a) 1 hour
- (b) 8 hours
- (c) 20 hours ?
- A car can travel 26km on 2 litres of petrol. How far can it travel on :
 - (a) 1 litre
- (b) 6 litres
- (c) 12½ litres of petrol?



- 12 dinner plates cost £29.40. How much would you pay for 16 plates ?
- 4. 20 metres of copper piping costs £28.40. How much would 17 metres cost ?
- 5. If 8 men take 12 days to dig a ditch how long would it take 6 men to dig the same ditch?



- 6. A builder employed 14 men to landscape a garden. It took them 6 days. How long would it have taken 12 men to landscape the same garden?
- 7. At a constant speed a train can travel 497 km in 7 hours. How far could it travel in 10 hours?
- Two dozen oranges cost £3.12. How much would you pay for 8 oranges ?



- A woman worked for 9 hours and was paid £61.20. How much would she be paid if she worked for 16 hours?
- 10. A farmer has enough feed to last his 20 cows 16 days. How long would the feed last if he had 64 cows?
- 11. A car can complete a journey in 6 hours at an average speed of 65 km/h. How long would it take to complete the same journey at an average speed of 78 km/h?
- Six bottles of wine is the exact amount you need to give 21 people one glass each.
 - (a) How many bottles would you need to give 56 people one glass each?
 - (b) How many people could you give a glass of wine if you had 32 bottles?



- 13. A town, with a population of 144, is under seige. It has enough food to last the people 24 days. If they take in an extra 48 people how long will the food supply now last?
- 14. A gang of 36 dockers can unload a ship in 8 hours. If 4 of the dockers are ill, and don't show for work, how long will it now take to unload the ship?

Proportion (Direct and Inverse Mixed Exercise) - Answers

1. (a) 4 units

32 units (b)

80 units (c)

(a) 13 km 2.

(b) 78 km (c) 162·5 km

3. £39-20

£24-14 4.

16 days 5.

7 days 6.

710 km 7.

8. £1.04

£108-80 9.

5 days 10.

5 hours 11.

12.

(a) 16 bottles (b) 112 people

18 days 14. 13.

9 hours