

## GCSE Exam Questions

# Conversion Graphs | Ratio & Proportion



1) The graph shows the conversion between pints and litres.



(a) Use the graph to estimate the number of litres equivalent to 14 pints.

		(1)
(b)	Use the graph to estimate the number of pints equivalent to 12 litres.	
		(1)
(c)	A bath can hold 70 litres of water. Estimate the number of pints equivalent to 70 litres.	
		(2)
	(4 1	marks)



2) A knot is the speed unit used in sailing.

One knot is equivalent to 1.15 miles per hour

(a) Use the information above and the axes provided to draw a conversion graph for knots and miles per hour.



(2)

(b) Use your line to convert 25 miles per hour to knots.Give your answer to the nearest integer.

(1) (3 marks)



3) The graphs show the conversion between Pound Sterling and US Dollars and US Dollars to South African Rand.



(a) John wishes to buy a camera. He can buy it in the UK for £360 or order it from South Africa for 6000 Rand including postage. Is it cheaper to buy the camera in the UK or order it from South Africa?

(3)

(b) Convert 400 South Rand to Pound Sterling.



The graphs show the conversion between pounds, £ and euros,€, and the conversion between euros, € and Japanese Yen, ¥.



Use the information to draw a conversion graph for pounds, £ to Japanese Yen, ¥.



Pounds, £

(4 marks)



	Question	Answer	Marks
1)	The graph shows the conversion between pints and litres. $g_{f}^{f_{0}} = \frac{1}{2} + $		
(a)	Use the graph to estimate the number of litres equivalent to 14 pints.	(a) 8	(1)
(b)	Use the graph to estimate the number of pints equivalent to 12 litres.	<b>(b)</b> 21	(1)
(c)	A bath can hold 70 litres of water. Estimate the number of pints equivalent to 70 litres.	<ul> <li>(c) Using an appropriate factor of 70 litres and converting correctly, eg 10 litres = 17.6 pints Answer between 120 and 125 inclusive</li> </ul>	(1) (1)
2)	A knot is the speed unit used in sailing. One knot is equivalent to 1.15 miles per hour		
(a)	Use the information above and the axes provided to draw a conversion graph for knots and miles per hour.	(a) Integration of the set of t	(1) (1)
(b)	Use your line to convert 25 miles per hour to knots. Give your answer to the nearest integer.	(b) 22 or 23 knots	(1)



	Question	Answer	Marks
3) (a)	The graphs show the conversion between Pound Sterling and US Dollars and US Dollars to South African Rand. $\int_{g_{und}} \int_{g_{und}} \int_{g_$	<ul> <li>(a) Converts £360 to \$520</li> <li>Converts 6000 Rand to \$500</li> <li>or converts \$520 to 5700 Rand</li> <li>States that camera is cheaper if ordered from the UK</li> </ul>	(1) (1) (1)
(b)	Convert 400 South Rand to Pound Sterling.	<ul><li>(b) Converts 400 Rand to \$35 - \$37</li><li>Converts their amount of \$ to £22-£25</li></ul>	(1) (1)





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