

money shared.

2. Jun 89
A sum of money was to be divided among A, B, and C in the ratio 2 : 3 : 5. The largest share amounts to \$1200.
Calculate
- The total sum of money to be shared
 - A's share
 - The percentage of the total amount that B receives
3. Jun 92
A piece of string 64 cm long is divided in three pieces in the ratio 1 : 2 : 5. Calculate the length of the longest piece.
4. Jan 99
A piece of wood is divided into three pieces in the ratio 3 : 4 : 2. the length of the longest piece is 72 cm. Calculate the length of the piece of wood.
5. Jun 02
A metal is made from copper, zinc, and lead in the ratio 13 : 6 : 1. The mass of zinc is 90 kg. Calculate the mass of the metal.
6. Jun 91
The sum of \$2500 is divided among Peter, Queen , and Raymond. Raymond received half, Peter received \$312.50, and Queen received the remainder.
Calculate
- Raymond's share
 - Queen's share
 - The ratio in which the \$2500 was divided among the three persons.
 - The percentage of the total that Peter received
7. Jan 95
Share \$150 among John, Mary , and Sarah so that each of the two girls receives twice as much as John.
- Calculate the amount of money John received.
 - Express John's share as a fraction of the total amount.
 - Express Mary's share as a fraction of the total amount received by John and Sarah.
8. G Jun 92
Lilly, Margaret, and Nancy were each left \$12000 in their uncle's will.

Lilly decided to spend her money on clothes, holidays, and decorating her flat, in the ratio 4:5:7.

How much did she spend on decorating her flat?

9. G Dec 92
in 1985 Angella and John decided to start a business. Angella invested \$240,000 and John invested \$160,000.
They agreed that all profits should be divided in the same ratio as the sums of money invested. In 1990 the total profit was \$15,000.
- How much was John's share of the 1990 profit?
10. G Jun 99
Jason wins \$480 with a lottery scratch card. He decides to share his money between his friend Mary and himself in the ratio of 5: 7.
- How much money does each receive?
 - Jason spends 20% of his share. What percentage of the \$480 does Jason now have?
11. G Jun 2000
A coach party travelled to Europe for a holiday. The number of days they spent in France, Spain, and Italy were divided in the ratio 3:4:5. They spent 9 days in France.
- How many days was the complete holiday?
 - How many days did they spend in Italy?

Equating Ratios

12. Jun 94
The scale used for a map is 1:250000. The distance of M from N on the map is 4.4 cm. Calculate, in km, the actual distance of N from M .
13. Jan 00
A scale of 1:15000 is used to draw the map of a city
- Calculate the actual distance, in km, between two points in the city which lies 87 cm apart on the map.
 - The actual length of the playground in the city is 225 m. Calculate, in cm, the length on the map.
 - Given that the area of the playground on the map is 1.8 m^2 , calculate the width of the playground as shown on the map

14. G Jun 93

The plan of a garden is drawn to the scale of 1:20.

- Expressing your answer in cm, calculate the length of the line on the plan which represents a path 13 m long.
- Expressing your answer in square metres, calculate the area of a pond which is represented on the plan by an area of 125 cm²

15. Jun 03

A scale of 1: 25000 is used to draw the map of an island. Calculate the distance, in km, between two points on the island if the distance between them on the map is 36 cm

16. Jun 90

Some years ago US\$1.00 was equivalent to J\$3.50. Calculate the amount in US\$ that was equivalent to J\$8400.
After devaluation J\$1.00 was worth 70% of its original value. Calculate the new rate of exchange for US\$1.00 and hence calculate the amount of J\$ that would be equivalent to US\$2400.

17. Jun 93

The journey to a town along Route A takes 3 hrs by bus OR 1hr. 20min. by car. The journey along Route B takes 1hr. 12min by car.
Calculate the time the bus will take along Route B, assuming that the bus and car travel along Route B at the same rate as along Route A.

Variations

18. Jun 93

Given that y varies inversely as x^2 and that $y = 3$ when $x = 2$, calculate the value of y when $x = 3$.

19. Resit 95

If m varies directly as v^2 , and $m = 2$ when $v = 3$, calculate the value of m when $v = 6$.

20. Jun 98

If S varies directly as $(r + 1)$, and $S = 8$ when $r = 3$, calculate the value of r when $S = 20$.

21. Jun 99

Given that q varies directly as p , using the values of p and q in the table, calculate the values of a and b

p	2	8	a
q	6.1	b	1.2

22. Jan 05

Given that y varies inversely as x , use the values of x and y from the following table to calculate the values of a

x	2	32
y	8	a

23. Jun 04

The table below shows corresponding values for p and r

p	m	4	62.5
r	0.2	2	n

Given that p varies directly as r^3 , calculate the values of m and n

24. G Jun 91

The cost of printing birthday cards is given by the formula $y = \frac{3000}{x} + k$

where y cents is the cost per card, x is the number of cards printed, and k is a constant.

- Given that $y = 11$ when $x = 500$, calculate the cost per card when 300 cards are printed
- How many cards should be printed if the cost per card is to be 7 cents?

Miscellaneous

25. Jun 04

- Two recipes for making chocolate cake are shown in the table below.

	Cups of Milk	Cups of Chocolate
Recipe A	3	2
Recipe B	2	1

- What percent of the mixture used in Recipe A is chocolate?