EDEXCEL IGCSE MATHEMATICS

UNIT 1 (MODULAR)

NUMBER – RATIOS

QP & MS (2018 - 2025)

COMPILED BY:
SIR MUHAMMAD ABDULLAH SHAH

EXAM PREP ARENA
HUB OF EXAM PREPARATION

An Online Extensive Course

EDEXCEL IGCSE MATHEMATICS MODULAR FOR MAY & OCT 2026

by Sir Muhammad Abdullah Shah

Get ready for your **Edexcel IGCSE Mathematics Modular Unit 1 & 2** exams with our comprehensive course designed to cover the entire syllabus and provide intense practice with past exam questions.

Registrations Open

1. Available Sessions
   One-on-One
2. Class Modality
   Live classses on Google Meet
3. Starting From
   All year available
4. Contact Us
   +92 325 3595282

Register Now

+92 325 3595282 | exampreparena | Exam Prep Arena

EXAM PREP ARENA
HUB OF EXAM PREPARATION

1. Nov 2025 1H/Q6

Eli and Peta share \$275 in the ratio 2 : 3

Eli gives $\frac{3}{11}$ of his share to charity.

Peta gives 0.32 of her share to charity.

Work out the total amount that Eli and Peta give to charity.

\$.....

(Total for Question 6 is 4 marks)

2. June 2024 1H/Q14

The combined savings of Abel and Bahira are 15435 dinars.

The savings of Bahira are 45% more than the savings of Abel.

The savings of Bahira are $\frac{3}{2}$ times the savings of Chanda.

Work out the savings of Chanda.

..... dinars

(Total for Question 14 is 5 marks)

3. June 2024 1HR/Q3

Norberto sells white loaves of bread and brown loaves of bread.

He sells a total of 200 loaves such that

the number of white loaves sold : the number of brown loaves sold = 3 : 2

Norberto sells the white loaves for £1.50 each.
He sells the brown loaves for £1.75 each.

40% of the price of a white loaf is profit.
60% of the price of a brown loaf is profit.

Work out Norberto's total profit when he sells all 200 loaves.

£.....

(Total for Question 3 is 5 marks)

4. June 2023 1H/Q1

Last season, the number of goals scored by Arjun, by Simon and by Kath for their football team were in the ratios 2 : 5 : 8

Simon scored 12 more goals than Arjun.

Work out the number of goals scored by Kath.

.....

(Total for Question 1 is 3 marks)

5. Jan 2023 1H/Q5

In a box, there are only green sweets, orange sweets and yellow sweets.

There are 280 sweets in the box so that

the number of green sweets : the number of orange sweets = 2 : 3

and

the number of orange sweets : the number of yellow sweets = 1 : 5

Work out how many green sweets there are in the box.

.....

(Total for Question 5 is 3 marks)

6. Jan 2023 1HR/Q5

C grams of chocolate is shared in the ratios 2 : 5 : 8
The difference between the largest share and the smallest share is 390 grams.

Work out the value of C

$C =$ .....

(Total for Question 5 is 3 marks)

7. Jan 2022 1H/Q2

Danil, Gabriel and Hadley share some money in the ratios 3 : 5 : 9
The difference between the amount of money that Gabriel receives and the amount of money that Hadley receives is 196 euros.

Work out the amount of money that Danil receives.

..... euros

(Total for Question 2 is 3 marks)

8. May 2021 1H/Q4

On a farm there are chickens, ducks and pigs.

The ratio of the number of chickens to the number of ducks is 7 : 2
The ratio of the number of ducks to the number of pigs is 5 : 9
There are 36 pigs on the farm.

Work out the number of chickens on the farm.

.....

(Total for Question 4 is 3 marks)

9. Nov 2020 1HR/Q10

Alex makes 80 cakes to sell.
He makes chocolate cakes, lemon cakes and fruit cakes where

$$\text{number of chocolate cakes} : \text{number of lemon cakes} : \text{number of fruit cakes} = 3 : 2 : 5$$

Alex sells

all of the chocolate cakes

$\frac{3}{4}$ of the lemon cakes

$\frac{7}{8}$ of the fruit cakes

The profit he makes on each cake he sells is shown in the table.

Type of cake	Profit per cake he sells
chocolate	£2.00
lemon	£1.70
fruit	£2.40

Work out the total profit that Alex makes from the cakes he sells.

£.....

(Total for Question 10 is 5 marks)

10. Jan 2020 1H/Q5

120 children go on an activity holiday.
The ratio of the number of girls to the number of boys is 3 : 5

On Sunday, all the children either go sailing or go climbing.

$\frac{16}{25}$ of the boys go climbing.

Twice as many girls go sailing as go climbing.

Work out how many children go sailing on Sunday.

.....

(Total for Question 5 is 6 marks)

11. Jan 2020 1HR/Q1

Brendon, Asha and Julie share some money in the ratios 3 : 2 : 6
The **total** amount of money that Asha and Julie receive is $36

Work out the amount of money that Brendon receives.

$.....

(Total for Question 1 is 3 marks)

12.June 2019 1HR/Q11

3 years ago, the ratio of Tom's age to Clemmie's age was 2 : 7
Tom is now 15 years old and Clemmie is now x years old.

Find the value of x.

$x =$ .....

(Total for Question 11 is 3 marks)

13. Jan 2019 1HR/Q2

There are 60 children in a club.

In the club, the ratio of the number of girls to the number of boys is 3 : 1

$\frac{3}{5}$ of the girls play a musical instrument.

$\frac{4}{5}$ of the boys play a musical instrument.

What fraction of the 60 children play a musical instrument?

.....

(Total for Question 2 is 4 marks)

14. June 2018 1HR/Q4

Anna and Lionel share \$675 in the ratio 4 : 5

Lionel gives $\frac{3}{5}$ of his share of the money to his mother.

How much money does Lionel give to his mother?

\$.....

(Total for Question 4 is 3 marks)

15. Specimen 1H/Q1

Aiko, Max and Pau share 5400 yen in the ratios 5 : 3 : 4

How much money does each of them get?

Aiko ..... yen

Max ..... yen

Pau ..... yen

(Total for Question 1 is 3 marks)

16. Sample 2018 1H/Q2

Penny, Amjit and James share some money in the ratios 3 : 6 : 4
Amjit gets $28 more than James.

Work out the amount of money that Penny gets.

$ .....

(Total for Question 2 is 3 marks)

MARKING SCHEME

1. Nov 2025 1H/Q6

6	$\frac{275}{2+3}$ (= 55) **or** $\frac{275}{2+3}\times 2$ (= 110) **or** $\frac{275}{2+3}\times 3$ (= 165) **OR** $\frac{2}{5}\times\frac{3}{11}\left(=\frac{6}{55}\right)$ **or** $\frac{3}{5}\times 0.32\left(=\frac{24}{125}\right)$ oe		4	M1	for a method to find **1** part of the ratio **or** a method to find the amount of money that either Eli or Peta gets **OR** finds the proportion of the money that either Eli or Peta gives to charity Allow decimal equivalents eg 0.4 and 0.27(27…) throughout for M marks
	"110" × $\frac{3}{11}$ (= 30) **or** "165" × 0.32 (= 52.8(0)) **OR** "$\frac{6}{55}$" × 275 (= 30) **or** "$\frac{24}{125}$" × 275 (= 52.8(0)) **or** "$\frac{6}{55}$" + "$\frac{24}{125}$" $\left(=\frac{414}{1375}\right)$ **OR** $\left(1-\frac{3}{11}\right)\times$"110"(= 80) **and** (1 – 0.32) × "165" (= 112.2(0))			M1	for a method to find the amount of money that either Eli or Peta gives to charity **OR** finds total proportion of the money that will be given to charity **OR** for a method to find the amount of money that Eli keeps **and** the amount of money that Peta keeps
	"110" × $\frac{3}{11}$ (= 30) **and** "165" × 0.32 (= 52.8(0)) **OR** "$\frac{6}{55}$" × 275 (= 30) **and** "$\frac{24}{125}$" × 275 (= 52.8(0)) **OR** "$\frac{414}{1375}$" × 275 **OR** $\left(1-\frac{3}{11}\right)\times$"110" + (1 – 0.32) × "165" (= 192.2(0))			M1	for a method to find the amount of money that both Eli **and** Peta gives to charity **OR** for a complete method **OR** For a method to find the total amount of money both Eli and Peta keep
	Correct answer scores full marks (unless from obvious incorrect working)	82.8(0)		A1	
					Total 4 marks

2. June 2024 1H/Q14

14	1 + 1.45 (= 2.45) or 1 + $\frac{29}{20}$ (= $\frac{49}{20}$) or B = 1.45A oe or B = $\frac{29}{20}$ A oe or A + 1.45A or A + $\frac{29}{20}$ A or 2.45A or (A : B =) 100 : 145 oe or 100 + 145 (= 245) oe or (B : C =) 3 : 2 oe or $B = 1.5C$ oe			5	B1 must identify ratios with Abel and Bahira or Bahira and Chanda Allow any letters for A, B and C
	A + 1.45A = 15 435 or 15 435 ÷ "2.45" or 15 435 ÷ "$\frac{49}{20}$" or 15 435 ÷ "245" × 100 or 63 × 100 (= 6300)	M2 for 15 435 ÷ $\left(\frac{1}{1.45}+1\right)$ (= 9135) oe or 15 435 ÷ $\left(\frac{49}{29}\right)$ (= 9135) oe			M1 for a method to find Abel's savings or for 6300
	15 435 – "6300" or 1.45 × "6300" or 145 × "63" (= 9135)				M1 for a method to find Bahira's savings or for 9135
	"9135" ÷ $\frac{3}{2}$ oe or "9135" × $\frac{2}{3}$ oe				M1 for a method to find to find Chanda's savings
	Working not required, so correct answer scores full marks (unless from obvious incorrect working)		6090		A1
					Total 5 marks

3. June 2024 1HR/Q3

3	eg 200 ÷ (3 + 2) (= 40)		5	M1	for a method to find one 'share' of the ratio
	eg 3 × "40" (= 120) **and** 2 × "40"(= 80)			M1	for a method to find the number of white loaves **and** the number of brown loaves
	eg "120" × 1.50 (= 180) oe **and** "80" × 1.75 (= 140) oe **or** "120" × 0.4 (= 48) oe **and** "80" × 0.6 (= 48) oe **or** 0.4 × 1.50 (= 0.6) oe **and** 0.6 × 1.75 (= 1.05) oe			M1	for a method to find income from white loaves **and** brown loaves **or** number of white loaves **and** brown loaves that are entirely profit **or** profit from a single white loaf or a single brown loaf
	eg 0.4 × "180" (= 72) oe **and** 0.6 × "140"(= 84) oe **or** "48" × 1.50 (= 72) oe **and** "48" × 1.75 (= 84) oe **or** "0.6" × "120"(= 72) oe **and** "1.05" × "80"(= 84) oe			M1	for a complete method to find the total profit for the white loaves **and** the total profit for the brown loaves
	Correct answer scores full marks (unless from obvious incorrect working)	156		A1	cao award SCB4 for an answer of 164 or 174
					Total 5 marks

4. June 2023 1H/Q1

Q	Working	Answer	Mark	Notes	
1	12 ÷ (5 – 2) (= 4) **or** 2 : 5 = 8 : 20 **or** A = 8 **or** S = 20 **or** eg $\frac{5}{15}x-\frac{2}{15}x=12$ **or** $x = 60$		3	M1 for method to find the value of one share **or** working with the ratio for Arjun or Simon **or** setting up an equation **or** for finding the total number of goals (= 60)	M2 for $\frac{8}{5-2}\times 12$ oe
	eg 8 × "4" **or** $8\times\frac{8}{2}$ **or** 8 + 12 + 12 **or** $8\times\frac{20}{5}$ **or** 20 + 12 **or** "60"$\times\frac{8}{15}$			M1 for a complete method	
	Correct answer scores full marks (unless from obvious incorrect working)	32		A1 SCB1 for $\frac{8}{15}\times 12 (= 6.4)$	
					Total 3 marks

5. Jan 2023 1H/Q5

5	2 : 3 : 15 oe or 20 or (1 : 5) × 3 or (1 : 5 =) 3 : 15 or $2n : 3n : 15n$ e.g. 4 : 6 : 30 or G(reen) = 2, O(range) = 3 , Y(ellow) = 15		3	M1
	$\frac{2}{"20"}$, 280 oe or 14 × 2 or $\frac{2}{"2"+"3"+"15"}$, 280 oe or $\frac{2n}{"2n"+"3n"+"15n"}$, 280 oe			M1
	Correct answer scores full marks (unless from obvious incorrect working)	28		A1 or 28 : 42 : 210 or 28 , 42 , 210 If not in this order must be labelled correctly
				Total 3 marks

6. Jan 2023 1HR/Q5

5	$390 \div (8-2)$ $(=65)$ or $\frac{8}{15}-\frac{2}{15}=390$ or $\frac{8}{15}x-\frac{2}{15}x=390$ or $\frac{6}{15}=390$ or $\frac{6}{15}x=390$ oe		3	M1		M2 for $\frac{390\times15}{6}$ oe
	"65" × (2 + 5 + 8) oe or $\frac{1}{15}=65$ or $\frac{1}{15}x=65$ or $\frac{1}{5}=195$ or $\frac{1}{5}x=195$			M1	or for 975 seen with further work and a different answer	
	Correct answer scores full marks (unless from obvious incorrect working)	975		A1	SCB1 for 52, 130, 208 or 390, 975, 1560 (or 2925) or 97.5, 243.75, 390 (or 731.25)	
						Total 3 marks

7. Jan 2022 1H/Q2

2	$196 \div (9-5)$ $(=49)$ oe		3	M1	
	$3 \times$ "49"			M1	
		147		A1	SCB1 for an answer from 34.5 – 34.6 **or** an answer of 42
					Total 3 marks

8. May 2021 1H/Q4

4		eg $(36 \div 9) \times 5$ **or** 20 [ducks] **or** 20 : 36 **or** for writing the 3 parts of the ratio correctly eg 35 : 10 : 18 oe		3	M1	For a fully correct calculation for the number of ducks or stating 20 ducks – may be shown in a ratio – does not need to be labelled if it is clear that the number or calculation refers to the number of ducks
		"20" ÷ 2 = 10 **and** 10 × 7 oe **or** $\frac{36}{18}\times35$ oe			M1	For a correct calculation to find the number of chickens. (award the M2 for 70 : 20 : 36 or a different order if intention is clear eg by labels)
		Working not required, so correct answer scores full marks (unless from obvious incorrect working)	70		A1	
						Total 3 marks

9. Nov 2020 1HR/Q10

10	e.g. $\frac{3}{"10"}\times80(=24)$ **or** $\frac{2}{"10"}\times80(=16)$ **or** $\frac{5}{"10"}\times80(=40)$		5	M2	for a complete method to find the number of chocolate cakes **or** lemon cakes **or** fruit cakes "10" comes from 3 + 2 + 5 (M1 for correct use of the ratio e.g. $80 \div$ "10" $(=8)$)
	e.g. "16" × $\frac{3}{4}\times1.7(0)$ $(=20.4(0))$ **or** "40" × $\frac{7}{8}\times2.4(0)$ $(=84)$			M1	for a method to find the profit for lemon cakes **or** fruit cakes
	e.g. "24" × 2 $(=48)$ **and** "16" × $\frac{3}{4}\times1.7(0)$ $(=20.4(0))$ **and** "40" × $\frac{7}{8}\times2.4(0)$ $(=84)$			M1	for a method to find the profit for all 3 cakes
		152.4(0)		A1	
					Total 5 marks

10. Jan 2020 1H/Q5

5		120 ÷ (3 + 5) (= 15)		6	M1	M2 for $\frac{3}{8}\times120$ (= 45) **or** $\frac{5}{8}\times120$ (= 75) oe
		'15' × 3 (= 45) **or** '15' × 5 (= 75)			M1	
		'45' ÷ 3 (= 15) **or** '45' ÷ 3 × 2 (= 30)			M1	
		'75' × $\frac{16}{25}$ (= 48) **or** '75' × $\frac{9}{25}$ (= 27)			M1	
		E.g. ('45' ÷ 3 × 2) + ('75' × $\frac{9}{25}$) oe **or** '27' + '30' **or** ('75' – '48') + ('45' – '15')			M1 for a complete method	
			57		A1	
						Total 6 marks

11. Jan 2020 1HR/Q1

Q	Working	Answer	Mark	Notes
1	e.g. 36 ÷ (2 + 6) (= 4.5) **or** $36\div\frac{2+6}{3+2+6}$ (= 49.5) oe **or** Asha = £9 **OR** Julie = £27			M1
	e.g. 3 × "4.5" **or** "49.5"$\times\frac{3}{3+2+6}$ **or** "9"$\times\frac{3}{2}$ **or** "27"$\times\frac{3}{6}$			M1 or an answer of $\frac{27}{2}$
		13.5(0)	3	A1 SCB1 for 36/5 × 7(= 43.2) or 36/9 × 2(= 8)
				Total 3 marks

12. June 2019 1HR/Q11

11	15 – 3 : x – 3 = 2 : 7 **or** (15 – 3) ÷ 2 (= 6)	(n =) (15 – 3) ÷ $\frac{2}{2+7}$ (= 54) where n is the total age 3 years ago		3	M1	M2 for $\frac{(15-3)\times7}{2}$ (= 42)
	$\frac{x-3}{15-3}=\frac{7}{2}$ oe **or** 7 × "6" (= 42)	"54" × $\frac{7}{2+7}$ (= 42)			M1	
			45		A1	
						Total 3 marks

13. Jan 2019 1HR/Q2

Question	Working	Answer	Mark	Notes
2	$\frac{3}{4}\times60$ (= 45) **or** $\frac{1}{4}\times60$(= 15) **OR** $\frac{3}{4}\times\frac{3}{5}\left(=\frac{9}{20}\right)$	$\frac{13}{20}$	4	M1
	$\frac{3}{5}\times$"45"(= 27) **or** $\frac{4}{5}\times$"15" (= 12) **OR** $\frac{1}{4}\times\frac{4}{5}\left(=\frac{4}{20}\right)$			M1
	$\frac{\text{"27"+"12"}}{60}$ **OR** "$\frac{9}{20}$"+"$\frac{4}{20}$"			M1 For a complete method
				A1 oe

14. June 2018 1HR/Q4

4	675 ÷ (5 + 4) × 5 (= 375)	225	3	M1	M2 675 ÷ (5 + 4) × 3
	"375" ÷ 5 × 3			M1 dep M1	
				A1	
					Total 3 marks

15. Specimen 1H/Q1

Q	Working	Answer	Mark	Notes
1	5400 ÷ (5 + 3 + 4) (=450)			M1
	"450" × 5 **or** "450" × 3 **or** "450" × 4			M1
		2250, 1350, 1800	3	A1
				Total 3 marks

16. Sample 2018 1H/Q2

2	28÷ (6 − 4) (=14) '14' × 3 (=42)	42	3	AO1	M1 M1 (dep) A1	or use of cancelled ratios (e.g. 3 : 6 : 4 = 0.75 : 1.5 : 1) 28÷0.5(=56) or cancelled ratios, (e.g. 56×0.75) or M2 for $28 \div \frac{2}{3}$ oe