Name	Date started	Target end date

REVISE
.wales

F2.02 — Primes, factors, multiples, LCM & HCF

Spec 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.2.5, 1.2.6 — Unit 2 (no calculator)

Primes, factors, multiples, HCF and LCM: identifying prime numbers, breaking a number into its prime factorisation by factor tree, and using those factorisations to find the highest common factor and lowest common multiple of two numbers. Sourced from legacy WJEC GCSE Mathematics-Numeracy Foundation papers (3300U10/U20) and accessible content from Intermediate papers (3300U30/U40), organised for revision under the 2025 spec.

2025 SPECIFICATION

Estimated time for entire question pack: ~3 hours 10 minutes

*Derived from the GCSE Higher pace of **~1.5 min/mark** (127 marks across 57 questions).*

*You are advised to **not** attempt to complete all of this in one sitting.*

ABOUT THIS QUESTION PACK

This is a **focused single-topic practice pack**, not a single mock paper. Questions are organised against the 2025 specification.

Questions are ordered chronologically by sitting, with custom-written and SAM questions at the end.

INSTRUCTIONS

Use black ink or black ball-point pen. Show all working — method marks are awarded for clear setup.

*A calculator is **not** permitted on any question in this pack (Unit 2 is the non-calculator paper).*

Primes, factors, multiples, LCM & HCF — what the new spec asks

WJEC GCSE Mathematics (first teaching 2025) · Unit 2: non-calculator.

Primes & factors 1.1.6

- Recognise prime numbers up to at least 20.
- List factors of a whole number systematically.
- Distinguish factors from multiples.

Prime factorisation 1.1.6

- Express a number as a product of prime factors.
- Use index notation for repeated primes.
- Use a factor tree as the working method.

HCF & LCM 1.1.6

- Find the HCF of two numbers from prime factorisations.
- Find the LCM of two numbers from prime factorisations.
- Apply HCF/LCM to simple word problems.

Exam strategy 1.1

- Non-calculator — build the factor tree carefully.
- List primes 2, 3, 5, 7, 11 to start the tree.
- Cross-check HCF × LCM = a × b for two numbers.

Crib sheet »

Primes, factors, multiples, LCM & HCF in one page

Quick-reference notes — revisit before each question. Don't use during the questions.

Primes

A prime has **exactly two** factors: 1 and itself.

2, 3, 5, 7, 11, 13, 17, 19, 23, …

1 is *not* prime. 2 is the only even prime.

Factors vs multiples

Factor: divides into the number exactly.

Multiple: in the times table of the number.

Factors of 12: 1, 2, 3, 4, 6, 12. Multiples of 5: 5, 10, 15, 20, …

Prime factorisation

Use a *factor tree*: split into any two factors, keep splitting non-primes.

$60 = 2 \times 2 \times 3 \times 5 = 2^2 \times 3 \times 5$.

HCF from prime factors

HCF = product of common primes (lowest power)

$12 = 2^2 \times 3$, $18 = 2 \times 3^2$. HCF = $2 \times 3 = 6$.

LCM from prime factors

LCM = product of all primes (highest power)

12 & 18: LCM = $2^2 \times 3^2 = 36$.

Common traps

- Calling 1 prime, or 9 prime ($9 = 3 \times 3$).
- Mixing up HCF and LCM.
- Forgetting to include shared primes in the LCM.

Examiner only

4. Matthew writes down three **different** numbers.

- One number is a square number.
- The other two numbers are factors of 20.
- The sum of the three numbers is 24.

What three numbers did Matthew write down? [3]

.....

.....

.....

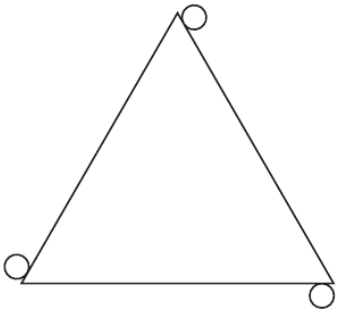
.....

.....

.....

Matthew's three numbers are ..... , ... and .....

5. *(a)* What is the order of rotational symmetry of the shape below? [1]



.....

(b) Name a 4-sided shape with rotational symmetry of order 4. [1]

.....

.....

Examiner only

(c) Draw the line $y = -3$ on the graph paper.

Write down the values of x where the line $y = -3$ cuts the curve $y = x^2 - 5x + 2$.
Give your answers correct to 1 decimal place. [2]

Values of x are ..... and .....

12. (a) Express 700 as a product of its prime factors in index form. [3]

(b) The number 33 554 432 is equal to 2^{25}.

Explain how this tells you that 33 554 432 is not a square number. [1]

Examiner only

(c) If a large number of people played the game, approximately what fraction of them would you expect to choose a white ball?
Circle your answer. [1]

$\frac{1}{10}$ $\frac{1}{5}$ $\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$

18. (a) Factorise $x^3 - 5x$. [1]

(b) Expand and simplify $(2x - 3)(x + 4)$. [2]

(c) Factorise $x^2 - 3x - 28$. [2]

Examiner only

9. On the diagram, mark the point P with a cross so that

- $B\hat{A}P = 72°$,
- $AP = 6{\cdot}8\,\text{cm}$. [2]

Examiner only

11. *(a)* Calculate $\frac{145{\cdot}3}{(12{\cdot}4 - 9{\cdot}8)^3}$, giving your answer correct to 3 significant figures. [2]

(b) Calculate the reciprocal of 47, giving your answer correct to 4 decimal places. [2]

12. Circle the correct answer in each of the following.

(a) Which of the following values **cannot** be an external angle of a regular polygon? [1]

10° 18° 30° 48° 72°

(b) An arrow on a spinner is facing north.
It is turned clockwise through an angle of 1530°.
In which direction will the arrow now be facing? [1]

North East South West None of these

(c) Point *A* is on a bearing of 100° from point *B*.
What is the bearing of point *B* from point *A*? [1]

260° 100° 280° 180° 80°

Examiner only

14. *(a)* Calculate the value of $(2 \times 10^{-4}) \times (7{\cdot}8 \times 10^{9})$.
Give your answer in standard form. [2]

(b) Calculate the value of $\dfrac{3{\cdot}9 \times 10^{8}}{3000}$.

Give your answer in standard form. [2]

15. Factorise $12x^2 + 3xy$. [2]

Examiner only

18. In the triangle ABC shown below, $B\hat{A}C = 40°$ and $A\hat{C}B = 80°$.
X is a point on side AC such that $BX = BC$.

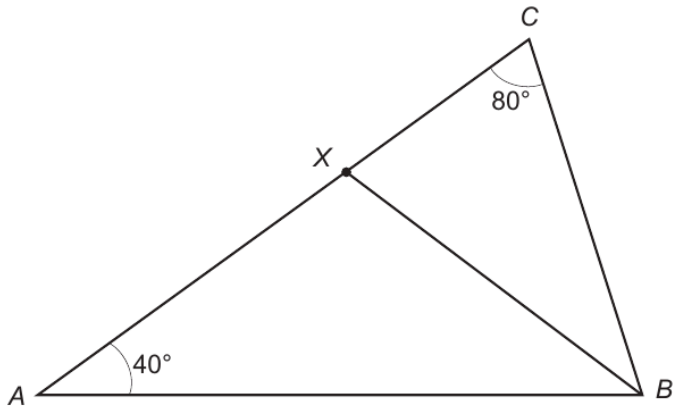


Diagram not drawn to scale

Prove that $AX = BX$.
Give reasons for each step of your proof.
You must show all your working. [5]

END OF PAPER

Examiner only

3. Here are 9 numbers:

27 19 20 32 21 29 20 24 33

(a) Find the mean of these numbers. [3]

(b) Neil says,

"To find the median, you just choose the middle number in the list.
The median of these numbers is 21."

Neil's median is incorrect.
Explain what is wrong with Neil's method. [1]

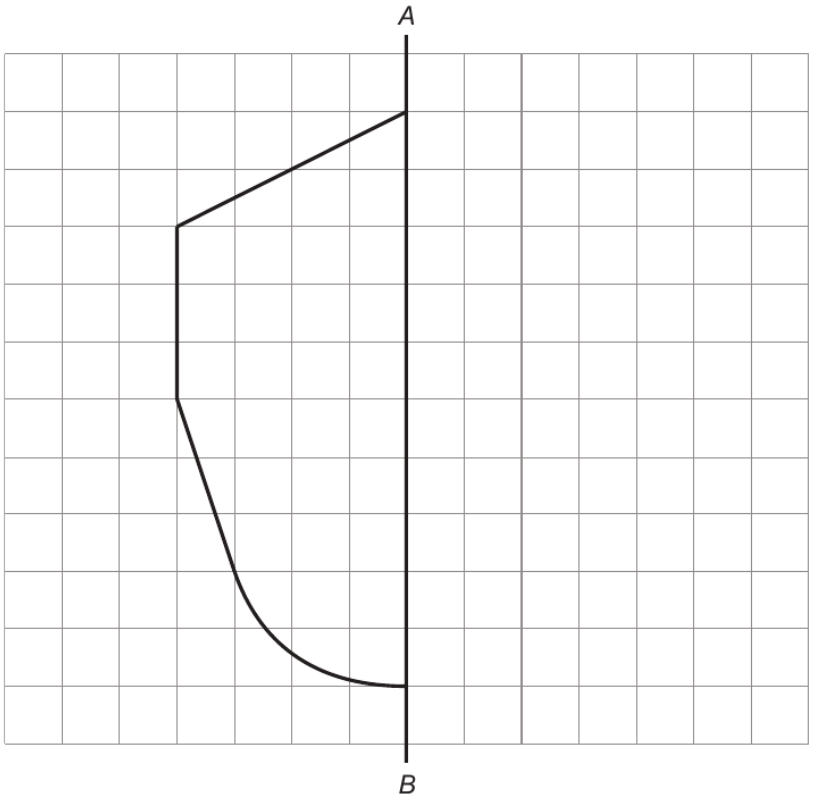
4. *(a)* One of the numbers below is a multiple of 13.
Circle the correct answer. [1]

2226 3213 1628 2843 6110

(b) Find the value of $\frac{30^2 + 20^2}{26}$. [1]

Examiner only

5. *(a)* Complete the following figure so that it is symmetrical about the line AB. [2]



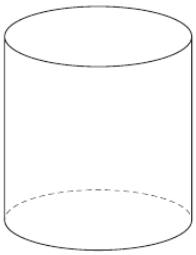
(b) Ben draws a shape that has:

- 4 sides,
- 4 angles of equal size,
- a pair of sides of length 4 cm, and
- a pair of sides of length 6 cm.

What type of shape has Ben drawn?
Circle the correct answer. [1]

square rhombus trapezium rectangle kite

(c) Write down the special name for the shape below. [1]



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Examiner only

5. *In this question, you will be assessed on the quality of your organisation, communication and accuracy in writing.*

ABC is an isosceles triangle and *ABP* is a straight line.
$AC = BC$ and $\hat{ACB} = 76°$.

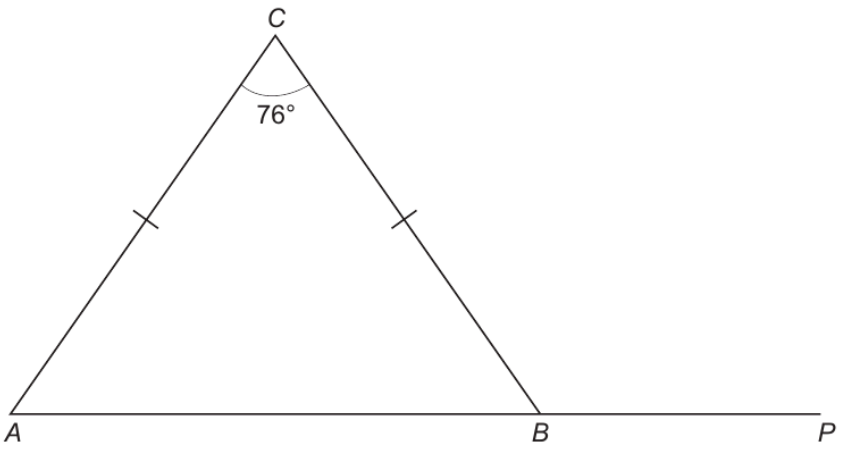


Diagram not drawn to scale

Calculate the size of $\hat{CBP}$.
You must show all your working. [3 + 2 OCW]

Examiner only

3. *(a)* Write down the first 3 multiples of 47. [1]

(b) One of the numbers below is a factor of 676.
Circle the correct number. [1]

22 32 42 52 62

(c) When one of the numbers below is divided by 22, there is a remainder of 11.
Circle the correct number. [1]

208 209 210 211 212

Examiner only

5. In this question, you must use only the numbers 3 and 7 to make other numbers.
You must only add or subtract.

For example, if we wanted an answer of 11, we could write

$$7 + 7 - 3 = 11.$$

Show how you can get each of the following answers.

(a) 2 [1]

Write your solution in the box below.

= 2

(b) 8 [1]

Write your solution in the box below.

= 8

(c) 19 [1]

Write your solution in the box below.

= 19

Examiner only

5. *In this question, you will be assessed on the quality of your organisation, communication and accuracy in writing.*

18% of £256 is shared in the ratio 2 : 1.
Calculate the value of the larger share.
Give your answer to the nearest 10p.

You must show all your working. [5 + 2 OCW]

6. *(a)* Factorise $7ab + 11a$. [1]

(b) Factorise $x^2 - 8x$. [1]

(c) Expand $4y(2 - 3y)$. [2]

Examiner only

8. *In this question, you will be assessed on the quality of your organisation, communication and accuracy in writing.*

In the diagram below, *ABCE* is a square and *CDE* is a right-angled triangle.
The length of *DE* is 4 cm and the area of triangle *CDE* is 14 cm^2.

Calculate the area of the **whole shape** *ABCDE*.
You must show all your working. [4 + 2 OCW]

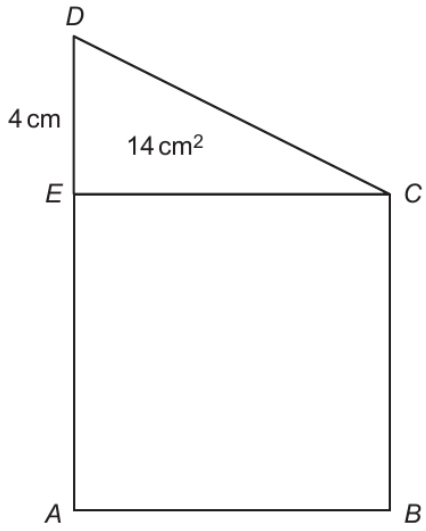


Diagram not drawn to scale

Examiner only

16. *ABCD* is a rectangle.
AB is parallel to *EF*.
AC, *CE* and *DG* are straight lines.

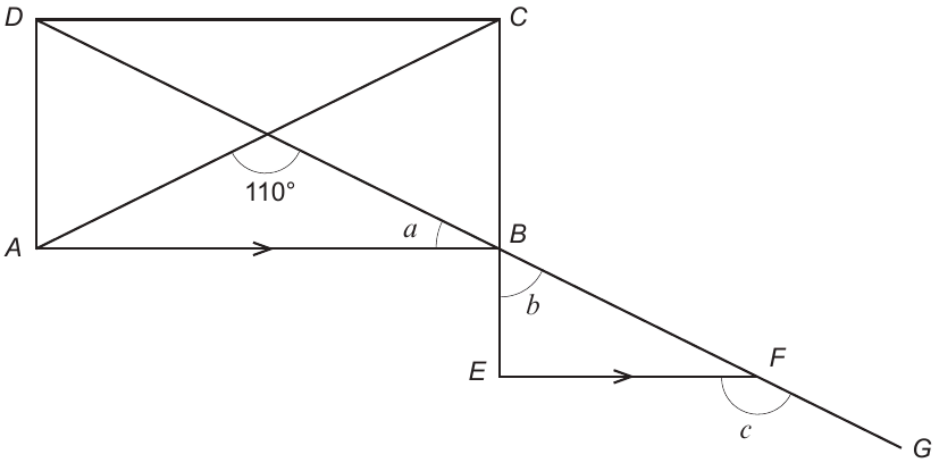


Diagram not drawn to scale

Find the size of each of the angles a, b and c. [4]

a = ... ° b = ... ° c = ... °

Examiner only

1. Complete the calculations below. [4]

975	×	74	=	.....
834	×	.....	=	43 368
.....	÷	43	=	1376
5056	÷	.....	=	32

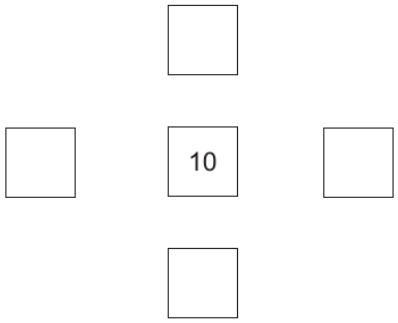
Space for working:

2. *(a)* Write down the first 5 multiples of 44. [1]

(b) A number has **exactly** four factors.
Its factors are 1, 3, 11 and the number itself.
What is the number? [1]

Examiner only

6. *(a)* Write one of the numbers 3, 5, 7, 9 in each box.
Each number may be used only once.
The sum of the numbers in the column must equal the sum of the numbers in the row.
[1]



Space for working:

(b) Write a **different multiple of 4** in each box to make this sum correct. [2]

Space for working:

Examiner only

8. *(a)* Solve the following equations.

(i) $\frac{x}{9} = 4$ [1]

(ii) $4(3x + 2) = 12$ [3]

(b) Factorise each of the following.

(i) $14a + 21$ [1]

(ii) $f^2 - f$ [1]

Examiner only

19. *(a)* Factorise $x^2 + 4x - 21$. Hence, solve $x^2 + 4x - 21 = 0$. [3]

(b) Solve the equation $\frac{2x-3}{5} + \frac{4x+5}{2} = \frac{11}{2}$. [4]

Examiner only

1. Fill in the boxes below to make each calculation correct. [4]

£1.63	+	35p	=	£ .....
£1.73	+	..... p	=	£2.26
7	×	84p	=	£ .....
17	×	£	=	£6.97

Space for working:

.....

.....

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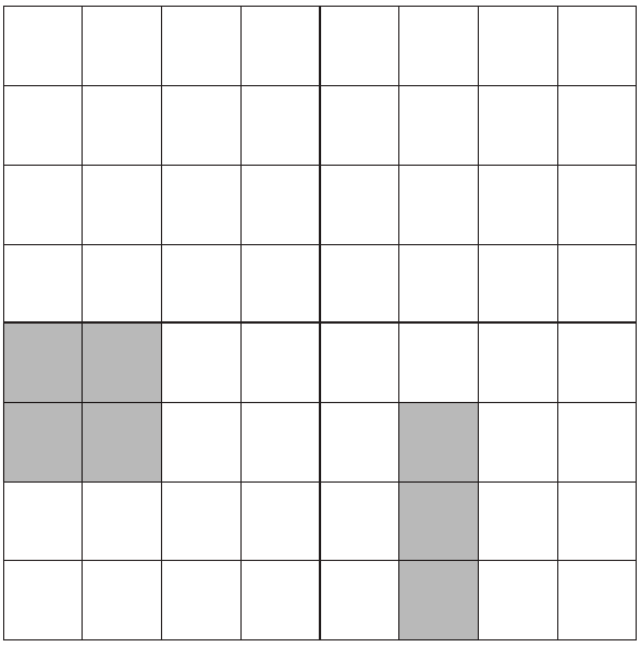
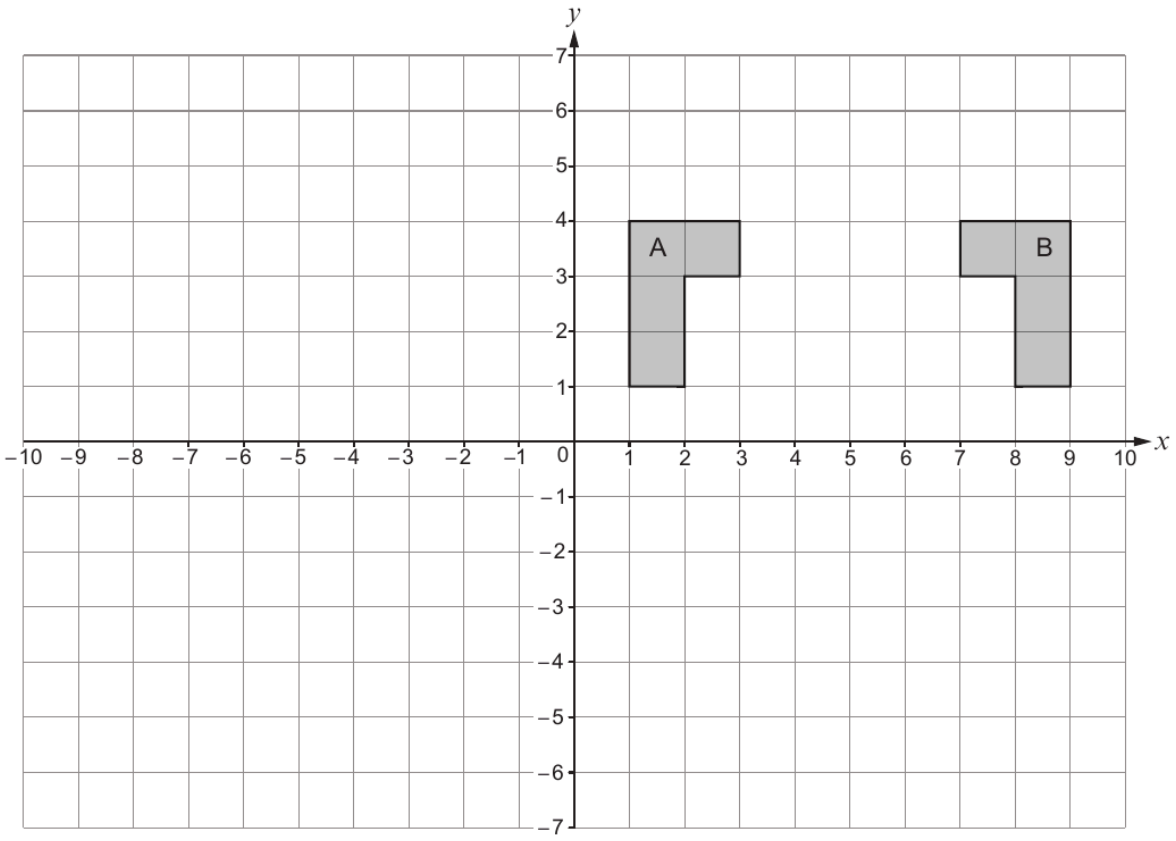
Examiner only

5. *(a)* Shade the least number of squares so that the grid has rotational symmetry of order 2. The squares you shade must be in the upper two quadrants. [2]



Examiner only

(b) Describe fully the **single** transformation that transforms shape A onto shape B. [2]



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3300U401
07

Examiner only

10. *(a)* (i) Evaluate $\frac{1}{0{\cdot}25^2}$. [1]

(ii) Evaluate $5{\cdot}4^3 \times 3{\cdot}7^2$.
Give your answer correct to the nearest 10. [2]

(b) Find 62% of 7·8. [2]

(c) (i) Which one of the following numbers is a multiple of 19?
Circle your answer. [1]

91 151 199 219 247

(ii) Which one of the following numbers is a cube number?
Circle your answer. [1]

1197 2197 3197 4197 5197

Examiner only

16. *(a)* Factorise $x^2 - 7x + 12$, and hence solve $x^2 - 7x + 12 = 0$. [3]

(b) Expand and simplify $(5x - 2)^2$. [2]

Examiner only

19. The diagram below shows a circle with centre at point *O*.
A, *B*, *C* and *D* are all points on the circumference of the circle.

AB = 7·5 cm and *BC* = 4·7 cm.

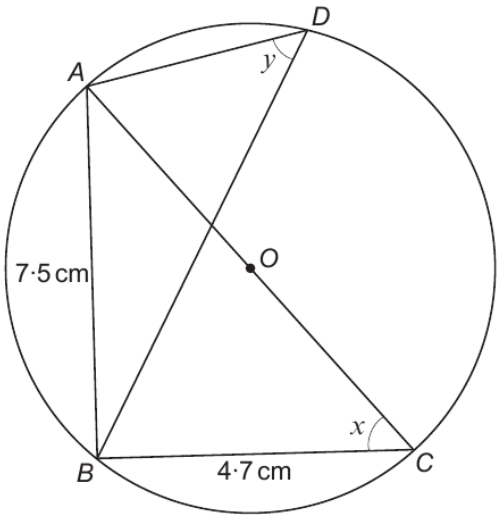


Diagram not drawn to scale

(a) (i) Give the reason why $\hat{ABC}$ is 90°. [1]

.....

.....

(ii) Calculate the size of angle x. [3]

.....

.....

.....

.....

.....

.....

(b) Write down the size of angle y.
State the circle theorem you have used to find your answer. [2]

y = ...

Circle theorem used: .....

.....

END OF PAPER

Examiner only

1. *(a)* Write 95 048 in words. [1]

(b) Find the sum of 872 and 59. [1]

(c) Multiply 250 by 5. [1]

(d) Work out $\frac{1}{3}$ of 624. [1]

(e) Write down all the factors of 18. [2]

The factors of 18 are .....

Examiner only

2. *(a)* One of these fractions can be written as a recurring decimal.
Circle this fraction. [1]

$\frac{117}{234}$ $\frac{5}{8}$ $\frac{13}{65}$ $\frac{24}{54}$ $\frac{3}{16}$

(b) Which one of the following numbers is a factor of 92?
Circle your answer. [1]

31 23 29 36 6

(c) Which one of the following numbers is a multiple of 17?
Circle your answer. [1]

1953 1653 2053 1853 1753

Examiner only

11. *(a)* Find the Lowest Common Multiple (LCM) of 60 and 72. [2]

LCM of 60 and 72 is .....

(b) Express 882 as a product of its prime factors.
Give your answer in index form. [3]

Examiner only

1. Calculate each of the following.

(a) $3^2 \times 2^3$ [2]

(b) $-124 \div 4$ [1]

(c) 15% of 280 [1]

2. Write 0·3, $\frac{8}{25}$ and 31% in ascending order.

You must show all your working. [3]

....

Smallest value Greatest value

Examiner only

4. (a) Write down the first 4 multiples of 48. [1]

.....

....

(b) Circle the prime number below. [1]

3 4 6 8 9

.....

(c) A number has **exactly** four factors.
Its factors are 1, 3, 13 and the number itself.
What is the number? [1]

.....

.....

.....

Examiner only

12. (a) Factorise $8x^2 + 6xy$. [2]

(b) (i) Factorise $x^2 + 13x + 40$. [2]

(ii) Explain how you can check that your answer to part (i) is correct. [1]

Examiner only

14.

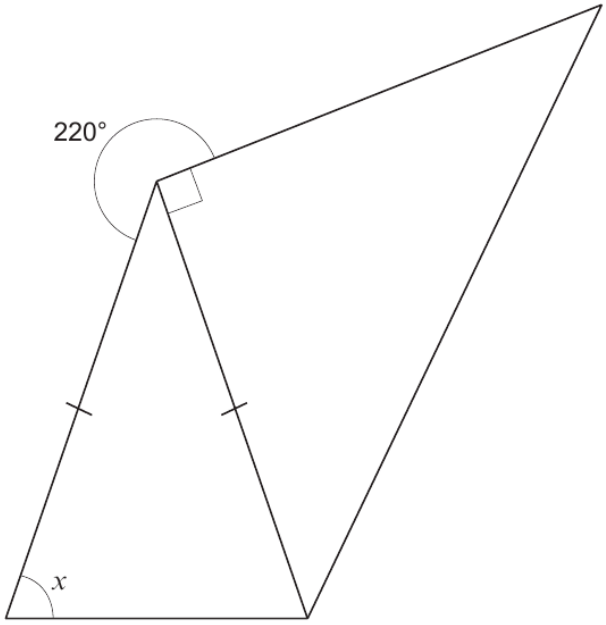


Diagram not drawn to scale

Calculate the size of angle x.
You must show all your working. [4]

x = ... °

Examiner only

1. (a) One of the calculations below is incorrect.
Circle the incorrect calculation. [1]

$78 + 9952 = 10030$ $875 \div 35 = 25$ $3685 - 2852 = 833$

$452 \times 63 = 28466$ $89775 \div 45 = 1995$

(b) One of the numbers below is a multiple of 38.
Circle the multiple of 38. [1]

2 19 338 388 3838

(c) Computers cost £432 each.
How many can be bought with £9876? [1]

Examiner only

3. Using only the numbers in the following list,

31 33 35 37 39 41 43

find

(a) the multiple of 5·5, [1]

.....

.....

.....

The multiple of 5·5 is .....

(b) the factor of 111. [1]

.....

.....

.....

The factor of 111 is .....

Examiner only

3.

Rhodri has a 6-digit code for his internet bank account.
He remembers the code as three lots of two-digit numbers.

The first two-digit number is a prime number between 25 and 30.
The second two-digit number is a square number between 10 and 20.
The third two-digit number is an odd number that is a multiple of 7 between 20 and 40.

All 6 digits of Rhodri's code are **different**.
What is Rhodri's 6-digit code? [4]

Rhodri's 6-digit code is: ☐ ☐ ☐ ☐ ☐ ☐

Examiner only

5. (a) Write 0·034 35 correct to two significant figures.
Circle your answer. [1]

0·03 0·033 0·0344 0·034 0·034 00

(b) Convert 6·7 m^2 into cm^2.
Circle your answer. [1]

670 6700 67 000 670 000 6 700 000

(c) Factorise $12e + 15$.
Circle your answer. [1]

$27e$ $3(4e + 5)$ $12(e + 15)$ $5(12e + 3)$ $15(0 \cdot 8e + 3)$

Examiner only

6. Find the whole number that satisfies all of the following conditions:

- It is a whole number between 15 and 35 inclusive.
- The number is a multiple of 2 but not a multiple of 4.
- 3 is a factor of this number, but 9 is **not** a factor of this number. [2]

The whole number is .....

7. Calculate $\frac{15 \cdot 4^2}{14 \cdot 59 - 7 \cdot 67}$, correct to 1 decimal place. [2]

Examiner only

12. Using only the numbers in the following list,

31 33 35 37 39 41 43

find

(a) the multiple of 5·5, [1]

.....

.....

.....

The multiple of 5·5 is .....

(b) the factor of 111. [1]

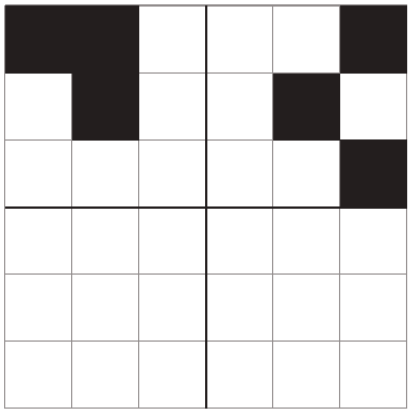
.....

.....

.....

The factor of 111 is .....

13. Shade the least number of squares so that the grid has rotational symmetry of order 2.
The squares you shade must be in the lower two quadrants. [2]



Examiner only

14. Two friends, Geraint and Dyfrig, are having a discussion.

(a) Geraint says,

"All prime numbers are odd numbers."

Explain why Geraint is incorrect. [1]

(b) Dyfrig says,

"All cube numbers are odd numbers."

Explain why Dyfrig is incorrect. [1]

Examiner only

14. Find the whole number that satisfies all of the following conditions:

- It is a whole number between 15 and 35 inclusive.
- The number is a multiple of 2 but not a multiple of 4.
- 3 is a factor of this number, but 9 is **not** a factor of this number. [2]

The whole number is .....

15. Calculate $\frac{15 \cdot 4^2}{14 \cdot 59 - 7 \cdot 67}$, correct to 1 decimal place. [2]

Examiner only

2. (a) Which **one** of the following fractions can be written as a recurring decimal? Circle your answer. [1]

$\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{6}$ $\frac{1}{8}$ $\frac{1}{10}$

.....

.....

(b) Which **three** numbers from the list below are prime numbers? [2]

27 31 35 39 43 47 51 55

The three prime numbers are:

..... , ... and .....

(c) $81 = 3^n$.

Write down the value of n. [1]

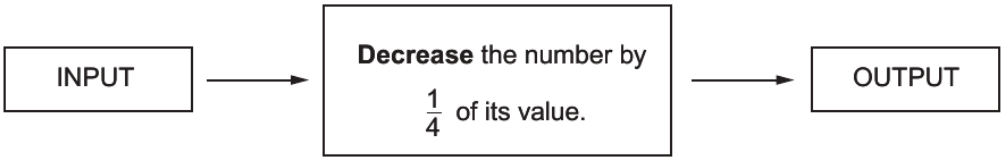
.....

.....

n = ...

Examiner only

10. A number machine is shown below.



For a given INPUT number, there will be an OUTPUT number.
The OUTPUT is then put back in the number machine as the next INPUT.
This process is then repeated many times.

The first INPUT number is 512.
What will be the first OUTPUT number that is less than 300? [4]

First OUTPUT number that is less than 300 = ...

Examiner only

11. (a) Solve the equation $7+5(x-2)=3x+8$. [3]

(b) Make f the subject of the formula $h=13-2f$. [2]

(c) Factorise $15x-35y$. [1]

Examiner only

12. (a) Which **one** of the following fractions can be written as a recurring decimal? Circle your answer. [1]

$\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{6}$ $\frac{1}{8}$ $\frac{1}{10}$

.....

.....

(b) Which **three** numbers from the list below are prime numbers? [2]

27 31 35 39 43 47 51 55

The three prime numbers are:

..... , ... and .....

Examiner only

12. A large number of prize tokens are placed in a box.
The tokens are identical in shape and size.

Gold, *Silver*, *Bronze* or *No Prize* is written on each token.

One token is chosen at random from the box.
The table below shows the probability of choosing a *Gold* prize token and the probability of choosing a *Silver* prize token.

Token	Gold	Silver	Bronze	No Prize
Probability	0·02	0·18		

(a) There are three times as many *No Prize* tokens in the box as there are *Bronze* prize tokens.

Complete the table. [2]

(b) There are 15 *Gold* prize tokens in the box.
How many *Silver* prize tokens are there in the box? [2]

Examiner only

4. A **decimal** number is written on a card.
You have three clues to help you work out the number on the card.

Clue 1: The number is between 5 and 12 inclusive.
Clue 2: The number is a multiple of 2·3.
Clue 3: The square of the number is greater than 50 but less than 120.

What is the decimal number on the card? [2]

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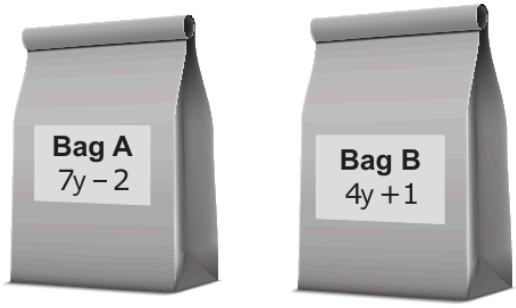
The decimal number on the card = ...

Examiner only

8. There are $7y - 2$ counters in Bag A.
There are $4y + 1$ counters in Bag B.



9 counters are added to Bag B.
There are now the same number of counters in each bag.

Form an equation in terms of y.
Solve the equation to find the value of y.
You must show all your working. [4]

9. A cup contains some tea.

Elsie drinks $\frac{5}{7}$ of the tea.

There are 44 ml of tea left in the cup.
How much tea was in the cup before Elsie drank any? [2]

Examiner only

9. Write an expression, in terms of x, to represent each of the following.

(a) 5 more than x [1]

(b) x less than 3 [1]

(c) half of x [1]

10. (a) What is 2 litres approximately equal to?
Circle your answer. [1]

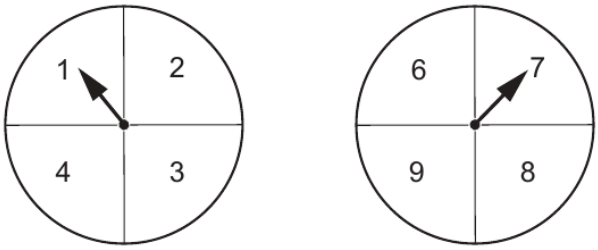
2 pints 3 pints 3·5 pints 4·4 pints 200 pints

(b) What is 32 km approximately equal to?
Circle your answer. [1]

16 miles 20 miles 32 miles 51 miles 64 miles

Examiner only

15. Vera has two fair spinners.
Each spinner is divided into quarters.
One spinner shows the values 1, 2, 3 and 4.
The other spinner shows the values 6, 7, 8 and 9.



Vera spins the two spinners. She then multiplies the two values together to form a product.
For example, the diagram above forms the product $1 \times 7 = 7$.

Consider the ways in which all the possible products can be formed.
Calculate the probability that the spinners will form a product that is a factor of 36.
You must show all your working to justify your answer. [4]

Examiner only

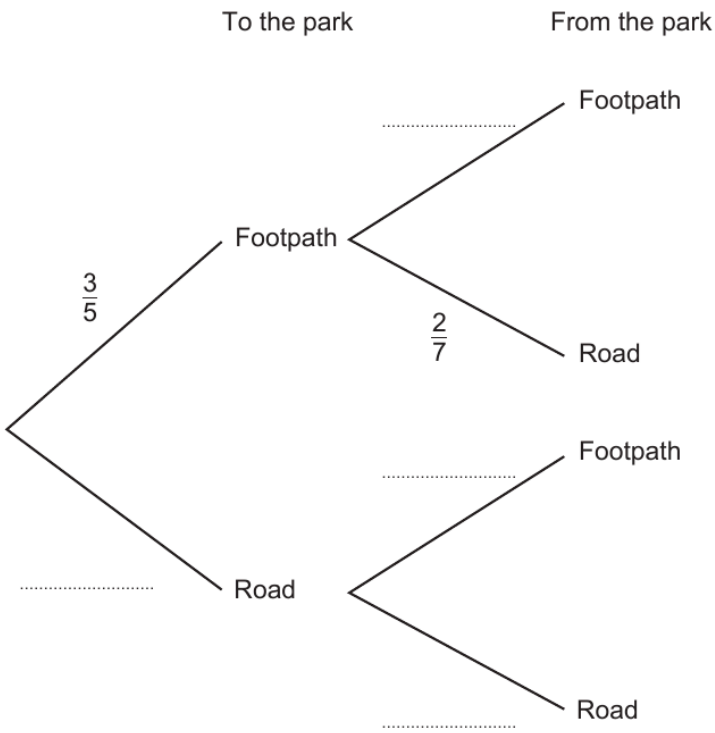
16. Beti walks her dog to a local park and back home every day.
She can either walk along a **footpath** or along a pavement at the side of a **road**.

The probability that Beti walks to the park along the footpath is $\frac{3}{5}$.

The probability that Beti walks home from the park along the road is $\frac{2}{7}$.

Her decisions on which routes to walk to and from the park are independent of each other.

(a) Complete the tree diagram below. [2]



(b) Find the probability that Beti walks to and from the park along the footpath. [2]

Examiner only

2. (a) There is one square number between 180 and 200.
What is this square number? [1]

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(b) A number has exactly **four** factors.
All of the factors are less than 30.
Three of the factors are 1, 2 and 26.
What is the other factor? [1]

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(c) *In this part of the question, you will be assessed on the quality of your accuracy in writing.*

Which length is exactly halfway between 280 m and 410 m?
You must show all your working. [2 + 1 W]

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Examiner only

5. In a game, each competitor will have 20 attempts at throwing a ball into a bucket.
They will get 1 point for every ball that lands in the bucket.

Sioned wants to keep a record of the total points for each competitor.
She decides to show the results in a table with the total points recorded in **groups of equal width**.

(a) She starts to draw a table using five groups, as shown below.

Total points	0 to 3	4 to 7	8 to 11	… to …	… to …
Number of competitors					

Explain why these groups will not be suitable. [1]

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.....

(b) Sioned considers using the table shown below.
She decides that it is suitable for recording all the total points in **groups of equal width**.
Fill in the two missing numbers in the **top** row. [1]

Total points	0 to 6	7 to	..... to 20
Number of competitors			

.....

.....

Examiner only

(c) Finally, Sioned decides to use the groups shown in the table below.
The results for the first 100 competitors are shown in the table.

Total points	0 to 2	3 to 5	6 to 8	9 to 11	12 to 14	15 to 17	18 to 20
Number of competitors	5	10	17	22	23	12	11

One of these 100 competitors is chosen at random.

(i) What is the probability that this competitor scored 6, 7 or 8 points? [1]

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(ii) Explain why the following statement may be incorrect. [1]

The probability that this competitor scored 19 points is $\frac{11}{100}$.

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Examiner only

17. Factorise $x^2 + 3x - 40$, and hence solve $x^2 + 3x - 40 = 0$. [3]

18. a and b are two numbers, where $b > a$.

The mean of the two numbers is equal to the range of the two numbers.

Show that $3a = b$. [3]

Examiner only

6. (a) Solve each of the following equations.

(i) $3y - 5 = 19$ [2]

(ii) $7(2t + 3) = 56$ [3]

(iii) $8p + 5 = 3p - 25$ [3]

(b) Factorise $w^2 - 6w$. [1]

Examiner only

9. Calculate the area of the trapezium shown below.
You must give the units of your answer. [3]

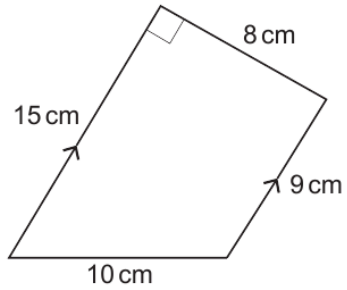

Diagram not drawn to scale

10. Express 945 as a product of its prime factors in index form. [3]

Examiner only

15. Solve each of the following equations.

(a) $3y - 5 = 19$ [2]

(b) $8p + 5 = 3p - 25$ [3]

Examiner only

16. A rectangle has length $(x+5)$ cm and width $(x+3)$ cm.
The area of the rectangle is 120 cm^2.

(a) Show that $x^2+8x-105=0$. [2]

(b) Factorise $x^2+8x-105$, and hence solve $x^2+8x-105=0$. [3]

(c) Use your solutions from part (b) to find the dimensions of the rectangle.
You must justify any decisions that you make. [2]

Length of rectangle = ... cm

Width of rectangle = ... cm