PINPOINT REVISION PACKS

0_to_53_Percent_Pinpoint_AI_Pack

Time Allocation = 87mins , Max = 77 Marks

Calculated Grade Boundaries:

Grade	Marks
3+	16
4-	31
4	47
4+	62
5-	77

Question 1 (AO1): (No Calc) 94% of students got this right (1 marks)

2 Expand $3x^2(2x - 5)$ **[1 mark]**

Circle your answer.

$-9x$ $6x^3 - 5$ $5x^3 - 8x^2$ $6x^3 - 15x^2$

Question 2 (AO1): (No Calc) 83% of students got this right (4 marks)

7. (*a*) Expand and simplify $2(x + 3y) + 4(x - y)$

.....

(2)

(*b*) Factorise completely $8p - 12pq$

.....

(2)

(Total 4 marks)

Question 3 (AO1): (No Calc) 82% of students got this right (2 marks)

1. The equation of a straight line is $y = 4x + 7$

(a) Write down the gradient of the line.

.....

(1)

(b) Write down the y-intercept of the line.

.....

(1)

(Total 2 mark)

Question 4 (AO1): (No Calc) 79% of students got this right (2 marks)

6. Write the following numbers in order of size.
Start with the smallest number.

0.038×10^{2} 3800×10^{-4} 380 0.38×10^{-1}

.....

(Total 2 marks)

Question 5 (AO1): (No Calc) 79% of students got this right (3 marks)

5. The table gives information about the lengths of the branches on a bush.

Length(Lcm)	**Frequency**
$0 \leq L < 10$	20
$10 \leq L < 20$	12
$20 \leq L < 30$	10
$30 \leq L < 40$	8
$40 \leq L < 50$	6
$50 \leq L < 60$	0

(b) Work out the total number of branches on the bush.

.....

(2)

(c) Write down the modal class interval.

.....

(1)

Question 6 (AO2): (No Calc) 75% of students got this right (4 marks)

4. Railtickets and Cheaptrains are two websites selling train tickets.

Each of the websites adds a credit card charge and a booking fee to the ticket price.

Railtickets
Credit card charge: 2.25% of ticket price
Booking fee: 80 pence

Cheaptrains
Credit card charge: 1.5% of ticket price
Booking fee: £1.90

Nadia wants to buy a train ticket.
The ticket price is £60 on each website.
Nadia will pay by credit card.

Will it be cheaper for Nadia to buy the train ticket from Railtickets or from Cheaptrains?

(Total 4 marks)

Question 7 (AO3): (No Calc) 75% of students got this right (3 marks)

6 The air pressure in a tyre measures 7.2 bar.

Air is leaking out at the rate of 0.2 bar per day.

6 (a) Assume that the air continues to leak at the same rate.
After how many days will the pressure measure 4.8 bar?

[2 marks]

Answer _____

6 (b) In fact, the rate that the air leaks out increases each day.
How does this affect your answer to part (a)?

[1 mark]

Question 8 (AO1): (No Calc) 73% of students got this right (3 marks)

3. Arwen buys a car for £4000
The value of the car depreciates by 10% each year.

Work out the value of the car after two years.

£ .....

(Total 3 marks)

Question 9 (AO1): (No Calc) 73% of students got this right (4 marks)

9. (*a*) Find the Highest Common Factor (HCF) of 30 and 42.

.....

(2)

(*b*) Find the Lowest Common Multiple (LCM) of 30 and 45.

.....

(2)

(Total 4 marks)

Question 10 (AO2): (No Calc) 73% of students got this right (2 marks)

7. Find the value of n so that $\frac{2^6 \times 2^3}{2^n} = 2^5$

(Total 2 marks)

Question 11 (AO2): (No Calc) 69% of students got this right (4 marks)

2. Dylan is driving from London to Newcastle.
He will drive a total distance of 240 miles.

Dylan leaves London at 09:30
It takes him $1\frac{1}{2}$ hours to travel the first 90 miles.

(a) Use this information to estimate the time Dylan will arrive in Newcastle.
You must show how you get your answer.

.....
(3)

(b) Write down **one** assumption you made in your answer to part (a).
If your assumption is wrong, how would this affect your answer to part (a)?

……

……

(1)
(Total 4 marks)

Question 12 (AO1): (No Calc) 67% of students got this right (2 marks)

5 Solve $\frac{x}{3} - 9 = 12$

[2 marks]

$x =$ _____

Question 13 (AO2): (No Calc) 66% of students got this right (5 marks)

8. The diagram shows a triangle.

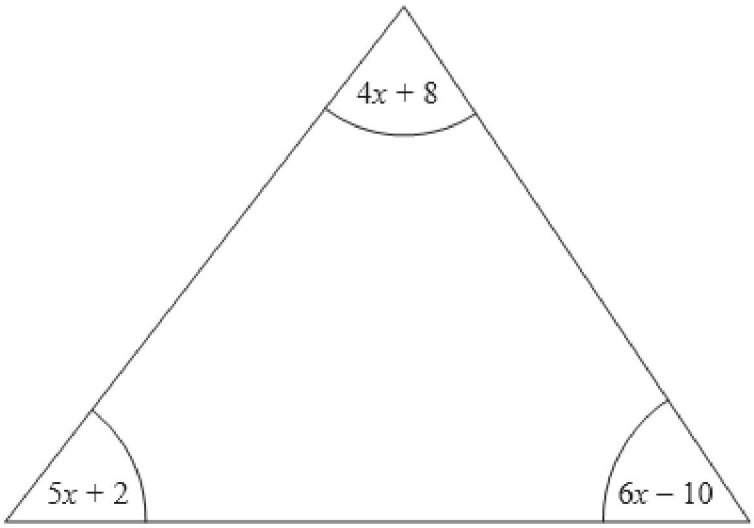


Diagram **NOT** accurately drawn

All the angles are measured in degrees.

Show that the triangle is isosceles.

(Total 5 marks)

Question 14 (AO1): (No Calc) 64% of students got this right (3 marks)

12 In a sale, the price of a pair of shoes is reduced.

The shoes have a normal price of £24
The shoes have a sale price of £19.20

Work out the percentage reduction in the price of the shoes.

..... %

(Total for Question 12 is 3 marks)

Question 15 (AO1): (No Calc) 64% of students got this right (3 marks)

1 Work out $3\frac{2}{3} - 1\frac{3}{4}$

.....

(Total for Question 1 is 3 marks)

Question 16 (AO1): (No Calc) 63% of students got this right (4 marks)

4. Suha has a full 600 m*l* bottle of wallpaper remover.
She is going to mix some of the wallpaper remover with water.

Here is the information on the label of the bottle.

Wallpaper remover
600 m*l*

Mix $\frac{1}{4}$ of the wallpaper remover with 4500 m*l* of water

Suha is going to use 750 m*l* of water.

How many millilitres of wallpaper remover should Suha use?
You must show your working.

.....m*l*

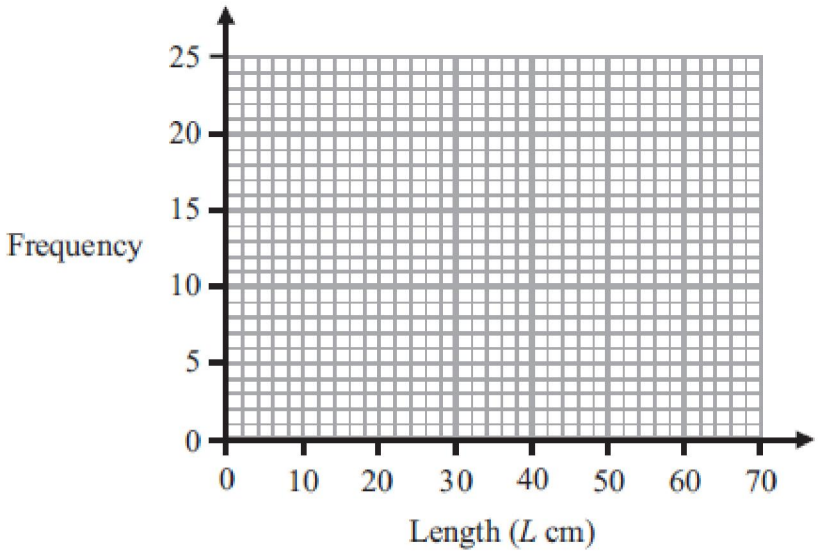
(Total 4 marks)

Question 17 (AO1): (No Calc) 61% of students got this right (2 marks)

5. The table gives information about the lengths of the branches on a bush.

Length(Lcm)	**Frequency**
$0 \leq L < 10$	20
$10 \leq L < 20$	12
$20 \leq L < 30$	10
$30 \leq L < 40$	8
$40 \leq L < 50$	6
$50 \leq L < 60$	0

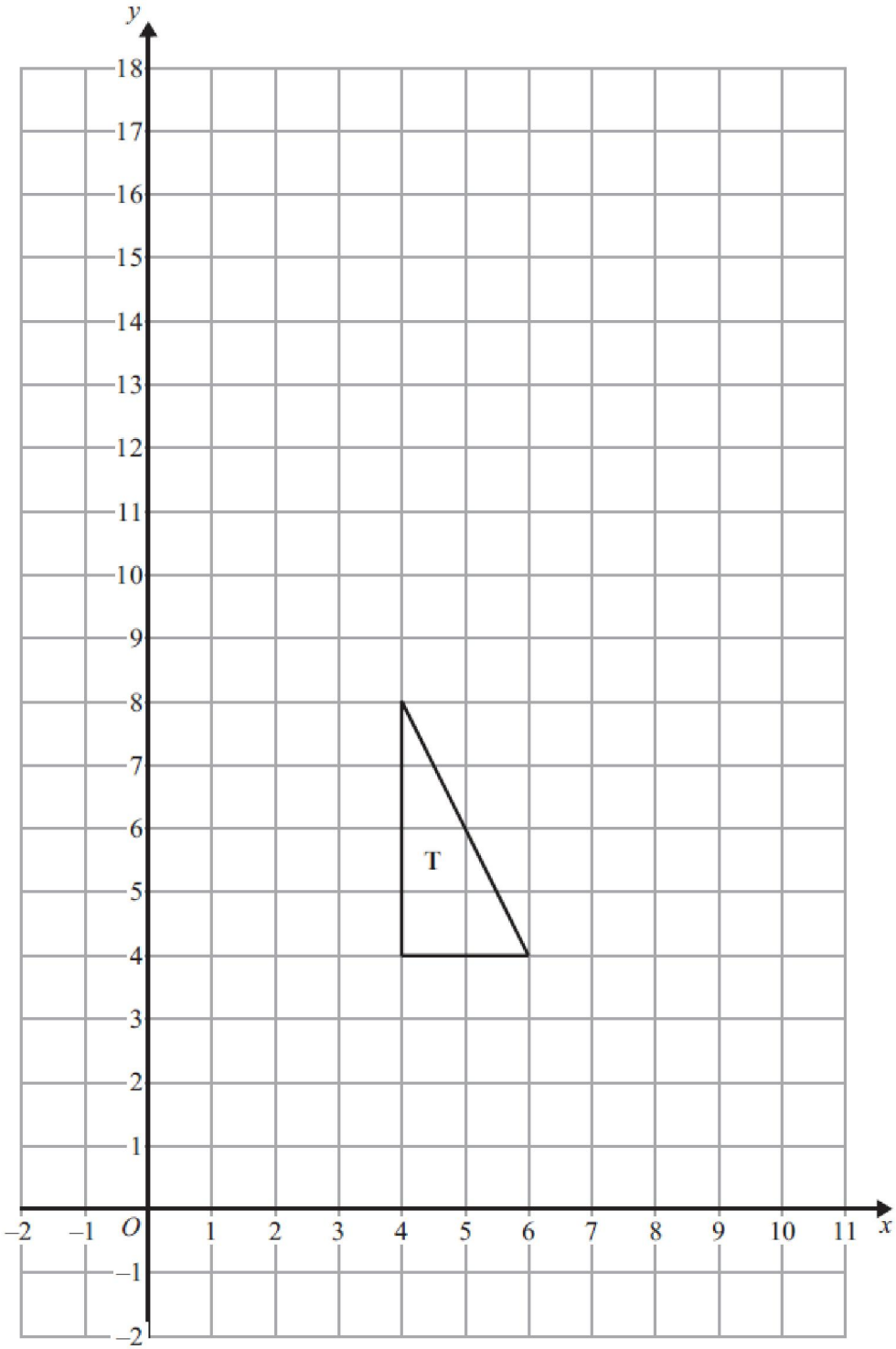
(a) Draw a frequency polygon to show this information.



(2)

Question 18 (AO1): (No Calc) 59% of students got this right (3 marks)

10.



Enlarge triangle **T** by a scale factor $\frac{1}{2}$, centre (2, 0).

(Total 3 marks)

Question 19 (AO1): (No Calc) 59% of students got this right (3 marks)

8. $-6 \leq 2y < 5$

y is an integer.

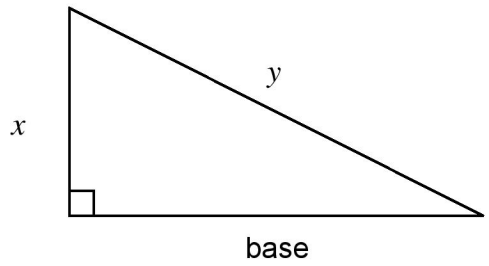
Write down all the possible values of y.

.....

(Total 3 marks)

Question 20 (AO3): (No Calc) 58% of students got this right (3 marks)

9 Noah is attempting to work out the base of **different** right-angled triangles.



Not drawn accurately

Here is his method with the working for $y = 10$ and $x = 6$

Work out the value of y^2	$10^2 = 100$
Work out the value of x^2	$6^2 = 36$
Work out the value of $y^2 - x^2$	$100 \ \ 36 \ \ = 64$
The base is $\sqrt{y^2 \ \ x^2}$	base $= \sqrt{64}$

Tick the correct statement.

[3 marks]

☐ The method will **always** give an answer which is a whole number.

☐ The method will **sometimes** give an answer which is a whole number.

☐ The method will **never** give an answer which is a whole number.

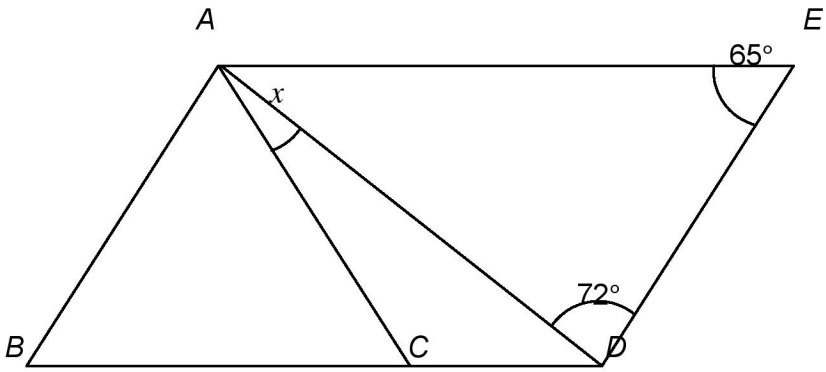
Show working to support your answer.

Question 21 (AO2): (No Calc) 53% of students got this right (3 marks)

7 *ABDE* is a parallelogram.

$AB = AC$

Not drawn accurately



Show that $x = 22°$

[3 marks]

Question 22 (AO3): (No Calc) 51% of students got this right (4 marks)

17 Naz buys a fridge from a shop for £189

The cost of delivery is proportional to the distance from the shop.

For 15 miles, the cost is £9

Naz lives 24 miles from the shop.
Is the total cost **more** than £200?

You **must** show your working.

[4 marks]

Answer _____

Question 23 (AO1): 51% of students got this right (5 marks)

10.

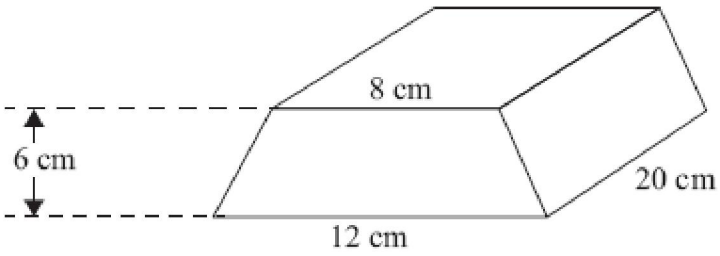


Diagram **NOT** accurately drawn

The diagram shows a solid prism made from metal.
The cross-section of the prism is a trapezium.

The parallel sides of the trapezium are 8 cm and 12 cm.
The height of the trapezium is 6 cm.
The length of the prism is 20 cm.

The density of the metal is 5 g/cm^3.

Calculate the mass of the prism.
Give your answer in kilograms.

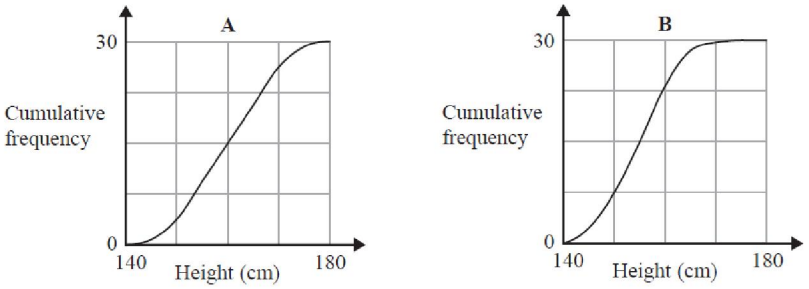
..... kg

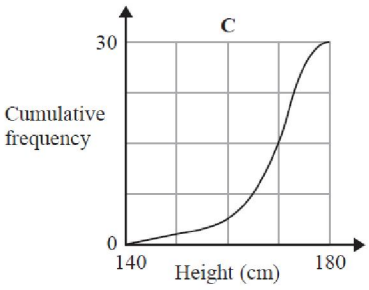
(Total 5 marks)

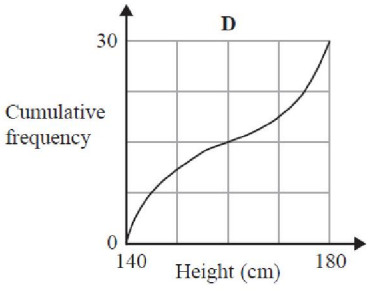
Question 24 (AO3): (No Calc) 50% of students got this right (2 marks)

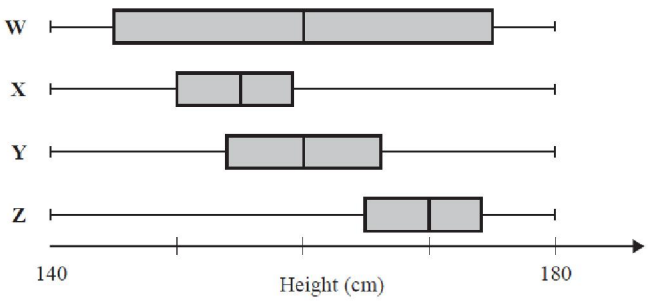
11 Gill measured the heights of children from four separate classes.

She drew a cumulative frequency graph and a box plot for each class.









Match each cumulative frequency graph to its box plot.

Cumulative frequency graph	Box plot
A	
B	
C	
D	

(Total for Question 11 is 2 marks)

Question 25 (AO1): (No Calc) 48% of students got this right (3 marks)

14 Estimate the value of $19.4^2 + 30\sqrt{104}$

[3 marks]

Answer _____

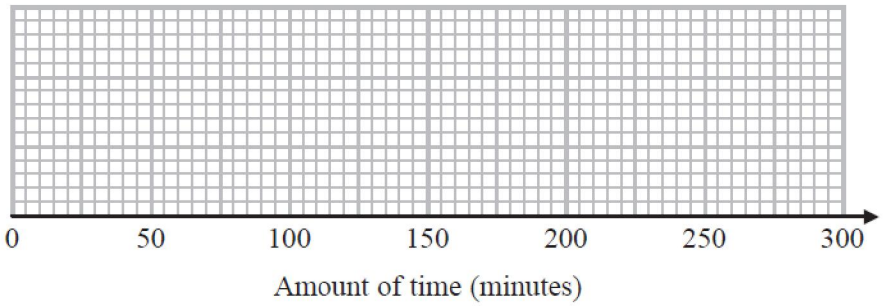
Ext Qn1 (AO1): (No Calc) Only 39% of students got this right(4 mark

15. The students in a class kept a record of the amount of time, in minutes, they spent doing homework last week.

The table shows information about the amount of time the girls spent doing homework last week.

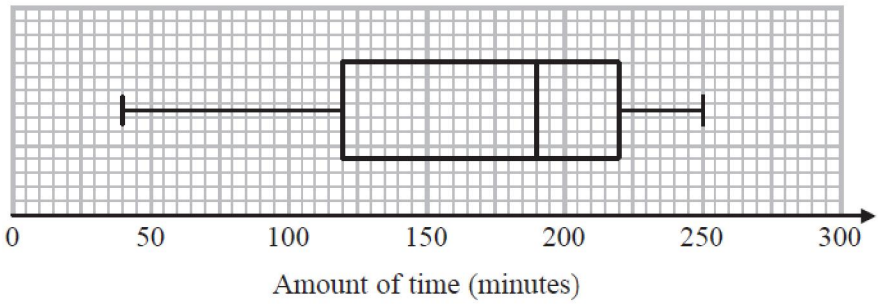
	Minutes
Least amount of time	60
Range	230
Median	170
Lower quartile	100
Upper quartile	220

(*a*) On the grid, draw a box plot for the information in the table.



(2)

The box plot below shows information about the amount of time the boys spent doing homework last week.



*(*b*) Compare the amount of time the girls spent doing homework with the amount of time the boys spent doing homework.

.....

.....

.....

.....

(2)

(Total for Question 15 is 4 marks)

Ext Qn2 (AO1): (No Calc) Only 39% of students got this right(3 mark

3. Jane has a carton of orange juice.
The carton is in the shape of a cuboid.

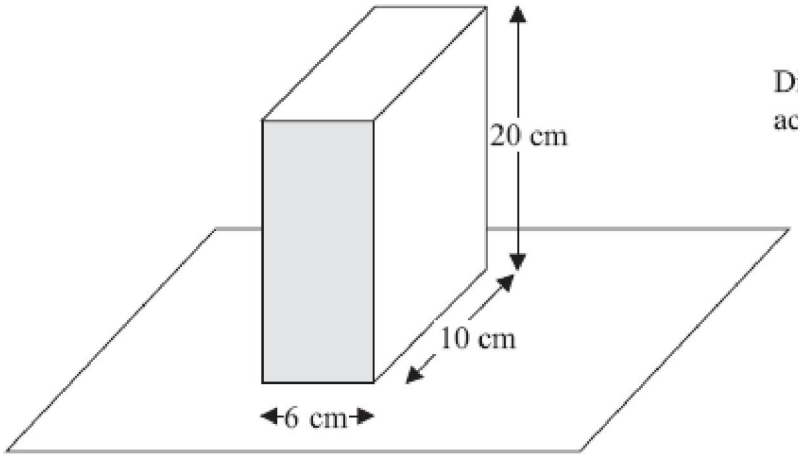


Diagram **NOT** accurately drawn

The depth of the orange juice in the carton is 8 cm.

Jane closes the carton.
Then she turns the carton over so that it stands on the shaded face.

Work out the depth, in cm, of the orange juice now.

Ext Qn3 (AO1): (No Calc) Only 39% of students got this right(2 mark

10 $\overrightarrow{AD} = \overrightarrow{AB} - \overrightarrow{BC}$

(*b*) On the grid, mark with a cross (×) the position of D.
Label this point D.

Answers to Qn 1 (AO1): (No Calc) 94% of students got this right

2	$6x^3 - 15x^2$	B1	

Answers to Qn 2 (AO1): (No Calc) 83% of students got this right

7.	(*a*)	$2x + 6y + 4x - 4y$	$6x + 2y$	2	M1 for $2x + 6y$ or $4x - 4y$ or $6x$ or $2y$ A1 for $6x + 2y$ [accept $2(3x + y)$]
	(*b*)	$2 \times 4 \times p - 3 \times 4 \times p \times q$	$4p(2 - 3q)$	2	B2 cao [B1 for $2p(4 - 6q)$ or $p(8 - 12q)$ or $4(2p - 3pq)$ or $2(4p - 6pq)$ or $4p(a + bq)$ where $a \neq 0$ and $b \neq 0$]

Answers to Qn 3 (AO1): (No Calc) 82% of students got this right

1.	(*a*)		4	1	B1 cao
	(*b*)		7 or (0,7)	1	B1 cao

Answers to Qn 4 (AO1): (No Calc) 79% of students got this right

6.		0.38×10^{-1}, 3800×10^{-4}, 0.038×10^{2}, 380	Correct order	2	M1 changing any one correctly or at least 3 in the correct order (ignoring one) or reverse order A1 for correct order (accept any form)

Answers to Qn 5 (AO1): (No Calc) 79% of students got this right

5.	(*b*)	20 + 12 + 10 + 8 + 6	56	2	M1 for 20 + 12 + 10 + 8 + 6 A1 cao
	(*c*)		$0 \leq L < 10$	1	B1 for $0 \leq L < 10$ oe

Answers to Qn 6 (AO2): (No Calc) 75% of students got this right

4.		2.25 × 60 ÷ 100 = 1.35 1.35 + 0.80 = 2.15 1.5 × 60 ÷ 100 = 0.90 0.90 + 1.90 = 2.80 **OR** 2.25 – 1.5 = 0.75 0.075 × 60 ÷ 100 = 0.45 0.80 + 0.45 = 1.25 1.25 < 1.90	Railtickets with correct calculations	4	M1 for correct method to find credit card charge for one company e.g. 0.0225 × 60(= 1.35) oe or 0.015 × 60 (= 0.9) oe M1 (dep) for correct method to find total additional charge or total price for one company e.g. 0.0225 × 60 + 0.80 or 0.015 × 60 + 1.90 or 2.15 or 2.8(0) or 62.15 or 62.8(0) A1 for 2.15 and 2.8(0) or 62.15 and 62.8(0) C1 (dep on M1) for a statement deducing the cheapest company, but figures used for the comparison must also be stated somewhere, and a clear association with the name of each company **OR** M1 for correct method to find difference in cost of credit card charge e.g. (2.25 – 1.5) × 60 ÷ 100 oe or 0.45 seen M1 (dep) for using difference with booking fee or finding difference between booking fees e.g. 0.80 + "0.45"(= 1.25) or 1.90 – "0.45" (= 1.45) or 1.90 – 0.8 (= 1.1(0)) A1 1.25 and 1.9(0) or 0.45 and 1.1(0) C1 (dep on M1) for a statement deducing the cheapest company, but figures used for the comparison must also be stated somewhere, and a clear association with the name of each company QWC: Decision and justification should be clear with working clearly presented and attributable

Answers to Qn 7 (AO3): (No Calc) 75% of students got this right

Q	Answer	Mark	Comments
6(a)	**Alternative method 1**		
	7.2 – 4.8 or 2.4	M1	
	12	A1	
	Alternative method 2		
	7.2 – at least eight 0.2s or 4.8 + at least eight 0.2s	M1	
	12	A1	
	Alternative method 3		
	7.2 0.2 or 36 and 4.8 0.2 or 24	M1	
	12	A1	
	Additional Guidance		
6(b)	It will take fewer days	B1	oe the answer would be lower eg it will be less than 12
	Additional Guidance		
	Quicker/faster than 12 days		B1
	Quicker/faster alone		B0

Answers to Qn 8 (AO1): (No Calc) 73% of students got this right

3.		$4000 - (\frac{10}{100} \times 4000) = 3600$ $3600 - (\frac{10}{100} \times 3600)$	3240	3	M1 for $4000 - \frac{10}{100}$ or 0.9×4000 (or equivalent) or 3600 or 400 or 3200 or 800 seen M1 (dep) 10 "3600" $- \frac{10}{100} \times$ "3600" or "3600" $\times$ 0.9 (or equivalent) A1 cao **or** M2 for 29.04000×0.9^2 (M1 for 4000×0.9^3) A1 cao [SC: B2 for an answer of £4840, with or without working]

Answers to Qn 9 (AO1): (No Calc) 73% of students got this right

9.	(*a*)	$30 = 2 \times 3 \times 5$ $42 = 2 \times 3 \times 7$ HCF = 2×3	6	2	M1 for 30 or 42 written correctly as a product of prime factors or attempt to list the factors of 30 and 42 (at least 4 for each including 6) A1 for HCF = 6
	(*b*)	30 , 60, 90, ... 45, 90, 135, ...	90	2	M1 for listing multiples of 30 and 45 (at least 60 and 90) or $2 \times 3 \times 5 \times 3$ A1 for LCM = 90 SC B1 for 210

Answers to Qn 10 (AO2): (No Calc) 73% of students got this right

7.		$6 + 3 = n + 5$ OR $64 \times 8 = 32 \times 2^n$	4	2	M1 for $6 + 3 - n = 5$ (or equivalent) or $(64 \times 8) \div 2^n = 32$ (or equivalent) or 2^{6+3} (or equivalent) seen A1 cao

Answers to Qn 11 (AO2): (No Calc) 69% of students got this right

2.	(a)		13:30	M1 M1 A1	90 ÷ 1.5 (= 60) 240 ÷ 60 (= 4 hours)
	(b)		Assumption and effect	C1	e.g. assumed constant speed – if not constant than could arrive earlier or later Assumed no stops – if stop then will arrive later

Answers to Qn 12 (AO1): (No Calc) 67% of students got this right

5	$\frac{x}{3} = 12 + 9$ or $\frac{x}{3} = 21$ or $x - 9 \ \ 3 = 12 \ \ 3$ or $x - 27 = 36$	M1	12 + 9 3 or (12 + 9) 3
	63	A1	
	Additional Guidance		
	12 + 9 3 = 39		M0A0

Answers to Qn 13 (AO2): (No Calc) 66% of students got this right

8.			"two angles are equal so the triangle is isosceles"	5	M1 for $6x - 10 + 4x + 8 + 5x + 2$ or $15x$ M1 for $6x - 10 + 4x + 8 + 5x + 2 = 180$ or $15x = 180$ or $(x =)\ 180 \div 15$ A1 $x = 12$ M1 (ft from '12' if M2 scored) for $5 \times$ '12' $+ 2$ or $6 \times$ '12' $- 10$ or $62(^o)$ or $4 \times$ '12' $+ 8$ or $56(^o)$ C1 both base angles as 62 and two angles are equal so the triangle is isosceles NB. $x = 12$ with no working scores M0M0A0 ; correct value of x from clear trial and improvement could gain M1M1A1 **OR** M1 $5x + 2 = 6x - 10$ or $2 + 10 = 6x - 5x$ A1 $x = 12$ M1 $5 \times 12 + 2$ or $6 \times 12 - 10$ or $62(^o)$ or $4 \times 12 + 8$ or $56(^o)$ M1 checking their angles add to 180^o, "62"+"62"+"56"= 180 C1 both base angles as 62 and two angles are equal so the triangle is isosceles **OR** M1 $4x + 8 = 5x + 2$ oe or $4x + 8 = 6x - 10$ A1 $x = 6$ or $x = 9$ M1 (dep) for substituting 'x' into one of the angles oe M1 for showing their angles do not sum to 180^o C0

Answers to Qn 14 (AO1): (No Calc) 64% of students got this right

12 In a sale, the price of a pair of shoes is reduced.

The shoes have a normal price of £24
The shoes have a sale price of £19.20

Work out the percentage reduction in the price of the shoes.

$$\%\ decrease = \frac{actual\ decrease}{original\ amount} \times 100$$

$$= \frac{24-19.20}{24} \times 100$$

$$= \frac{4.8}{24} \times 100 = 0.2 \times 100$$

$$= 20\%\ \text{decrease}$$

..... 20..... %

(Total for Question 12 is 3 marks)

Answers to Qn 15 (AO1): (No Calc) 64% of students got this right

1 Work out $3\frac{2}{3} - 1\frac{3}{4}$

$$3\frac{2}{3} - 1\frac{3}{4} = \frac{11}{3} - \frac{7}{4}$$
$$= \frac{44}{12} - \frac{21}{12} = \frac{23}{12}$$
$$= 1\frac{11}{12}$$

.....

(Total for Question 1 is 3 marks)

Answers to Qn 16 (AO1): (No Calc) 63% of students got this right

4.			25	4	M1 for $600 \div 4$ (=150) M1 for $4500 \div$ "150" (=30) M1 for $750 \div$ "30" A1 for 25 with supporting working **OR** M1 for $4500 \div 750$ (=6) or $750 \div 4500$ $(= \frac{1}{6})$ M1 for $600 \div 4$ (=150) or $600 \div$ "6" (=100) or $600 \times \frac{1}{6}$ (=100) M1 for "150" $\div$ "6" or "100" $\div 4$ or $150 \times \frac{1}{6}$ A1 for 25 with supporting working **OR** M1 for $4500 \div 750$ (=6) or $750 \div 4500$ $(= \frac{1}{6})$ M1 for $\frac{1}{4} \times \frac{1}{6} \left(= \frac{1}{24}\right)$ M1 for $\frac{1}{24} \times 600$ A1 for 25 with supporting working

Answers to Qn 17 (AO1): (No Calc) 61% of students got this right

5.	(*a*)		Correct frequency polygon	2	B2 for fully correct polygon. Points plotted at the midpoints ± ½ square (B1 for all points plotted accurately not joined or one error or one omission in plotting but joined) or all points plotted accurately and joined with first joined to last or all points at the correct heights and consistently within or at the ends of the intervals and joined (can include joining last to first to make a polygon)

Answers to Qn 18 (AO1): (No Calc) 59% of students got this right

10.			Vertices at (3, 2), (3, 4) and (4, 2)	3	M1 for centre (2, 0) marked M1 for all sides × ½ A1 cao SC B2 for correct enlargement from (2, 0), scale factor $\neq 0.5$ or for correct enlargement from (0, 2), scale factor = 0.5

Answers to Qn 19 (AO1): (No Calc) 59% of students got this right

8.		$-3 \leq y < 2.5$	$-3, -2, -1, 0, 1, 2$	3	M1 for dividing a list of integers by 2 or for $y \geq -3$ and/or $y < \frac{5}{2}$ seen or implied A2 for all integers correct (A1 for 5 correct with no more than one extra)

Answers to Qn 20 (AO3): (No Calc) 58% of students got this right

Q	Answer	Mark	Comments
9	The method will **sometimes** give an answer which is a whole number	B1	
	64 = 8 or correctly evaluated example where the answer is a whole number	B1	eg $5^2 - 4^2 = 9$ and 9 is a square number or $5^2 - 4^2 = 3^2$ oe
	Correctly evaluated example where the answer is not a whole number	B1	eg $3^2 - 2^2 = 5$ and 5 is not a square number oe
	Additional Guidance		
	1 or 2 marks can be gained for example(s) even if the decision is incorrect		
	3^2 2^2 = 5 and 5 is between 4 and 9, implies 5 is not square		B0B0B1

Answers to Qn 21 (AO2): (No Calc) 53% of students got this right

7	*DAE* = 180 − 65 − 72 or 43 or *ABC* = 65 or *DAB* = 72 or *EDB* = 180 − 65 or 115 or *BAE* = 180 − 65 or 115	M1	May be on diagram in correct position
	BAC = 180 − 65 − 65 or 50 or *ADB* = 115 − 72 or 43 and *ACD* = 115 or *BAC* = 50, *BAE* = 115 and *ADB* = 115 − 72 or 43 or *CAE* = 65 and *DAE* = 43 or *DAB* = 72 and *BAC* = 50	M1	May be on diagram in correct position oe
	72 – 50 = 22 or 180 − 115 − 43 = 22 or 115 − 50 − 43 = 22 or 65 − 43 = 22	A1	
	Additional Guidance		
	eg 115 or *A* = 50 is ambiguous Written work takes precedence over diagrams if contradictory.		M0

Answers to Qn 22 (AO3): (No Calc) 51% of students got this right

Q	Answer	Mark	Comments
17	**Alternative method 1**		
	$\frac{9}{15}$ or 0.6 or $\frac{24}{15}$ or 1.6	M1	oe
	$\frac{9}{15}$ 24 or $\frac{24}{15}$ 9 or 14.4(0)	M1dep	oe
	their 14.4(0) + 189 or 203.4(0)	M1	11 - 189
	203.4(0) and Yes	A1	11 and 14.4(0) and Yes or (11 ÷ $\frac{9}{15}$ =) 18.3(3...) and Yes
	Alternative method 2		
	200 – 189 or 11	M1	
	$\frac{9}{15}$ or 0.6 or $\frac{24}{15}$ or 1.6	M1	oe
	$\frac{9}{15}$ 24 or $\frac{24}{15}$ 9 or 14.4(0) or 11 ÷ $\frac{9}{15}$ or 18.3(3…)	M1dep	oe
	11 and 14.4(0) and Yes or 18.3(3…) and Yes	A1	
	Additional Guidance		

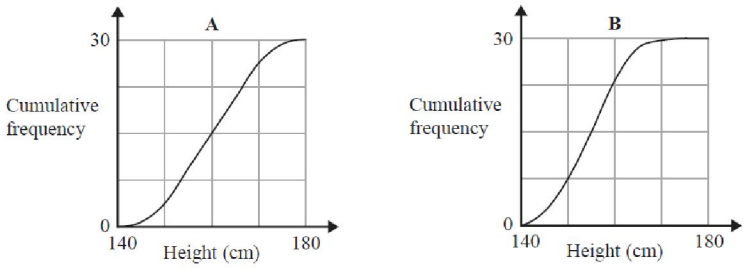
Answers to Qn 23 (AO1): 51% of students got this right

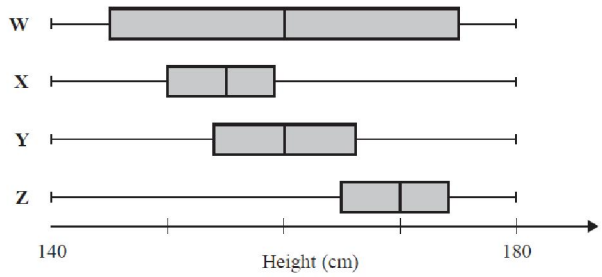
10.		½ (12 + 8) × 6 = 60 '60' × 20 = 1200 1200 × 5 = 6000 6000 ÷ 1000 = 6	6	5	M1 ½ (12 + 8) × 6 oe or 60 seen M1 (dep) '60' × 20 M1 (indep) '1200' × 5 A1 6000 cao A1 ft (dep on 1st or 3rd M1 scored) for 6

Answers to Qn 24 (AO3): (No Calc) 50% of students got this right

11 Joan measured the heights of students in four different classes.

She drew a cumulative frequency graph and a box plot for each class.





Match each cumulative frequency graph to its box plot.

Cumulative frequency graph	Box plot
A	W
B	Y
C	Z
D	X

(Total for Question 11 is 2 marks)

Answers to Qn 25 (AO1): (No Calc) 48% of students got this right

Q	Answer	Mark	Comments
14	20 or 100 or 10	M1	
	400 or 300 from correct rounding to 1 sig fig	M1dep	
	700	A1	
	Additional Guidance		
	$19^2 = 361 \rightarrow 400$ (no other working)		M0M0

Ext ANSWERS 1 (AO1): (No Calc) Only 39% of students got this rigl

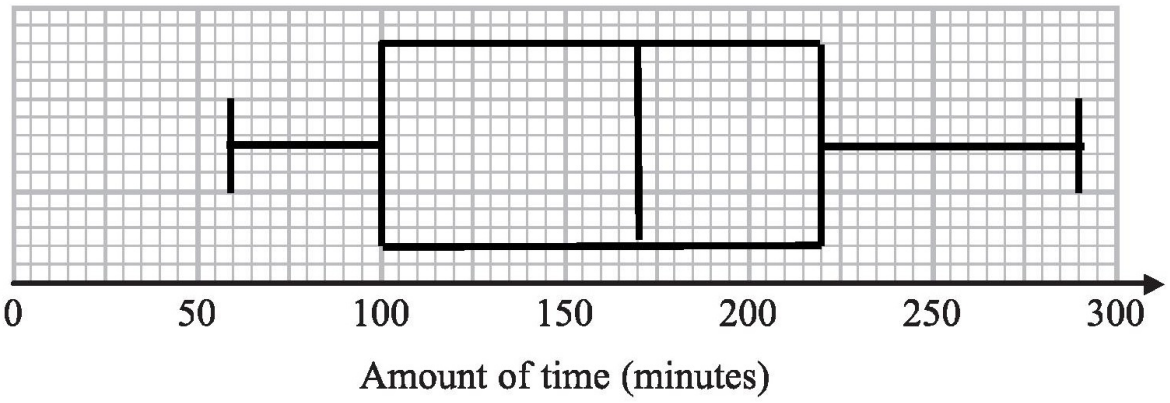
15 The students in a class kept a record of the amount of time, in minutes, they spent doing homework last week.

The table shows information about the amount of time the girls spent doing homework last week.

	Minutes
Least amount of time	60
Range	230
Median	170
Lower quartile	100
Upper quartile	220

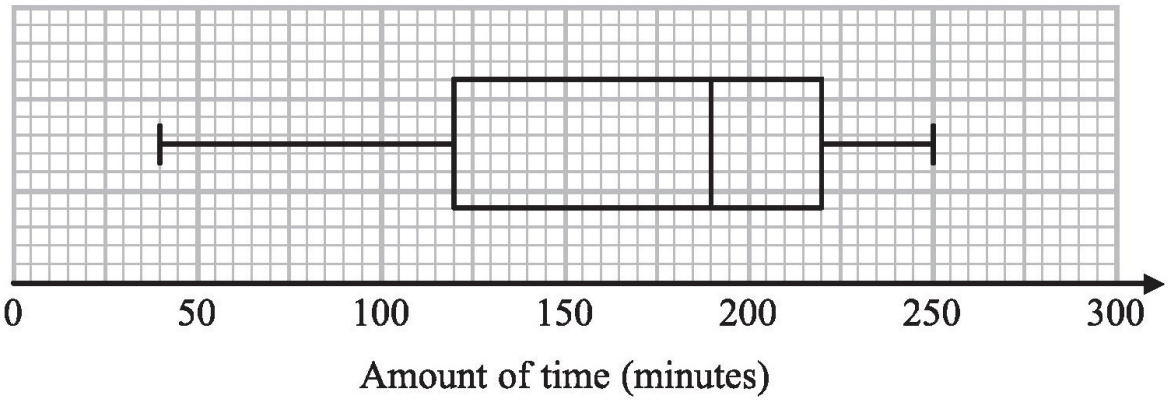
60 + 230 = 290
↑
max

(a) On the grid, draw a box plot for the information in the table.



(2)

The box plot below shows information about the amount of time the boys spent doing homework last week.



*(b) Compare the amount of time the girls spent doing homework with the amount of time the boys spent doing homework.

spent on homework

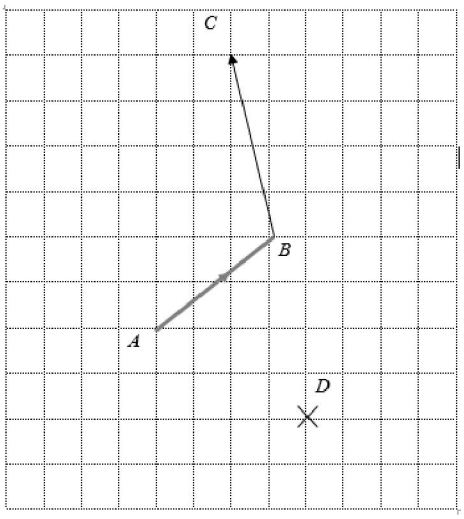
The median amount of time (eg the boys ...

Question Order Created by Pinpoint Learnings Automatic Differentiation Algorithmn

Ext ANSWERS 2 (AO1): (No Calc) Only 39% of students got this rigl

Question		Working	Answer	Mark	Notes
3.		$6 \times 10 \times 8 = 480$ $480 \div (6 \times 20) =$	4	3	M1 for $6 \times 10 \times 8$ or 480 seen M1 (dep) for '480' $\div (6 \times 20)$ oe A1 cao **OR** M1 for $20 \div 10$ (=2) or $10 \div 20$ $(=\frac{1}{2})$ or $\frac{8}{20}$ oe or $\frac{20}{8}$ oe M1 (dep) for $8 \div$ '2' or $8 \times \frac{1}{2}$ or $\frac{8}{20} \times 10$ oe or $10 \div \frac{20}{8}$ A1 cao SC : B2 for answer of 16 coming from $\frac{20 \times 8 \times 6}{10 \times 6}$ oe

Ext ANSWERS 3 (AO1): (No Calc) Only 39% of students got this rigl

Question	Working	Answer	Mark	Notes
10 (b)	× marked  		M1	for method to find the vector $\overrightarrow{AD}$ $=\begin{pmatrix}3--1\\2-4\end{pmatrix}=\begin{pmatrix}4\\-2\end{pmatrix}$ or for $\begin{pmatrix}1\\-4\end{pmatrix}$ drawn on the grid
			A1	for ft for correct position (×) D on their diagram