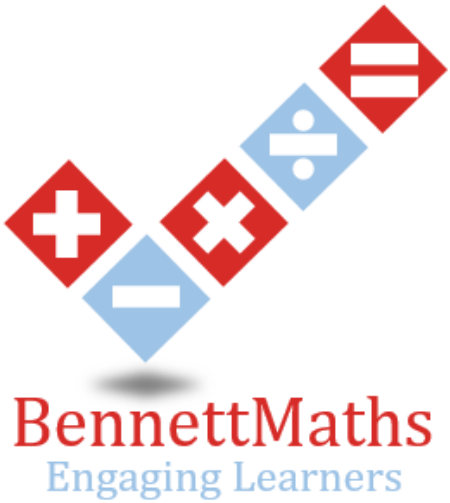
BennettMaths will be live on TikTok the night before paper 2, going through all the predicted papers.
Tuesday 2nd June at 8pm

Candidate surname	Other names



Pearson Edexcel

Best Guess Paper – 2F Calculator

Within this booklet you will find my best guess at which topics might be on the first Edexcel Foundation gcse maths paper.

There may be other topics that appear on paper 2, so please ensure that you continue to revise all topics.

The paper consists of 28 questions totalling 80 marks.

BennettMaths
Engaging Learners

BennettMaths will be live on TikTok the night before paper 2, going through all the predicted papers.
Tuesday 2nd June at 8pm

1 Simplify 3a + 4a + b

7a+b

(Total for Question 1 is 1 mark)

2 Write down two factors of 15

1, 15

(Total for Question 2 is 1 mark)

3 Write these numbers in order of size..
Start with the smallest number.

0.3 0.32 0.302 0.41 0.31

0·3, 0·302, 0·31, 0·32, 0·41

(Total for Question 3 is 1 mark)

4 Round 12.45 to the nearest whole number

12

(Total for Question 4 is 1 mark)

5 Write down the value of the 4 in the number 5427

400

(Total for Question 5 is 1 mark)

6 Work out 15% of 180

27

(Total for Question 6 is 1 mark)

7(a) Expand $3(2x - 4)$

$6x - 12$

(1)

(b) Solve $2x + 1 = 12$

$x = 5.5$

(2)

(c) Expand and simplify $4(2x + 1) + 3(x - 5)$

$8x + 4 + 3x - 15$

$11x - 11$

(2)

(d) Solve $\frac{x+4}{3} = 12$

$x + 4 = 36$

$x = 32$

(2)

(Total for Question 7 is 7 marks)

8 Amy (A), Lilly (L) and Sharon (S) take part in a race.

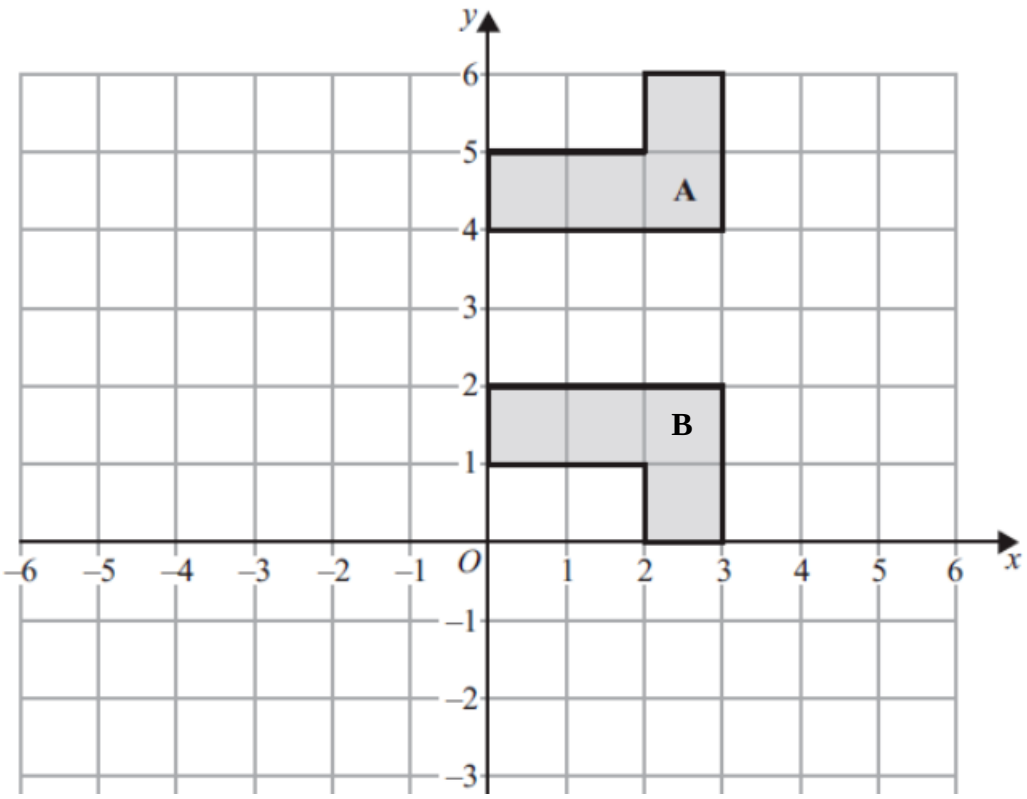
They will either finish in 1st, 2nd or 3rd place.

List all the possible outcomes for their finishing positions. The first one has been completed for you.

1st	2nd	3rd
A	L	S
A	S	L
L	A	S
L	S	A
S	A	L
S	L	A

(Total for Question 8 is 2 marks)

9



Describe fully the single transformation that maps shape A onto shape B.

Reflection in $y=3$

(Total for Question 9 is 2 marks)

10 The table shows the scores achieved by the United Kingdom in the past 6 Eurovision Song Contest finals.

Year	Score
2021	1
2022	466
2023	24
2024	46
2025	88
2026	1

(a) Work out the modal score that the United Kingdom achieved over the 6 finals

1

(1)

(b) Work out the median score that the United Kingdom achieved over the 5 finals

1, 1, 24, 46, 88, 466

35

(2)

$\frac{24+46}{2}$

(Total for Question 10 is 3 marks)

11 The two-way table shows the number of pupils in year 11 and their favourite core subject.

	Maths	English	Science	Total
Boys	138	21	67	226
Girls	112	63	13	188
Total	250	84	80	414

Complete the two-way table

(Total for Question 11 is 3 marks)

---

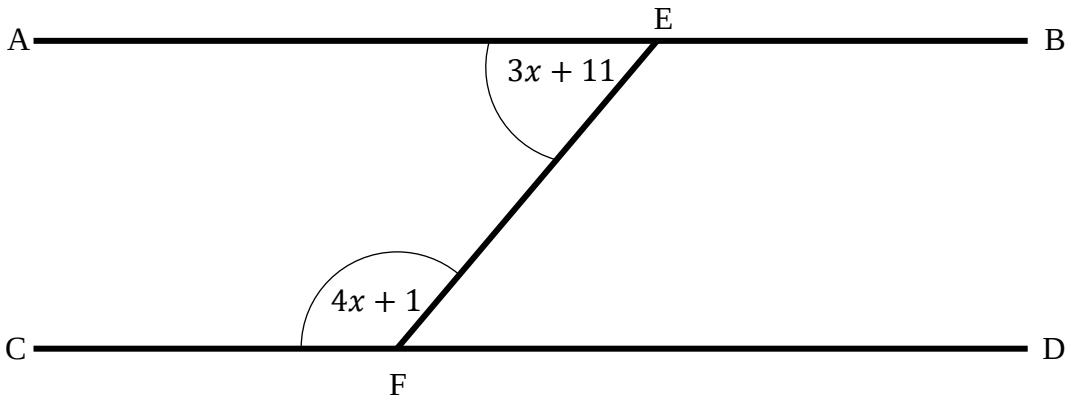
12 Complete the boxes to make the questions correct

(a) $\frac{1}{16} + \frac{5}{16} = \frac{3}{8}$

b) $\frac{12}{16} \times \frac{4}{7} = \frac{3}{7}$

(Total for Question 12 is 2 marks)

13 AB and CD are a set of parallel lines



Angle AEF = $3x + 11$
Angle CFE = $4x + 1$

Work out the size of x

$3x+11+4x+1=180$

$7x+12=180$

$7x=168$

$x=24$

(Total for Question 13 is 4 marks)

14 The exchange rate for pound sterling to euros is 1 : 1.17

Charlotte is going to travel to Spain, where they use the Euro currency.
She wants to convert £350 into Euros.

(a) Work out the amount of Euros that Charlotte will receive.

$350 \times 1.17 = 409.50$

(2)

(b) The exchange increases to 1 : 1.18. How will this affect the answer to part (a)

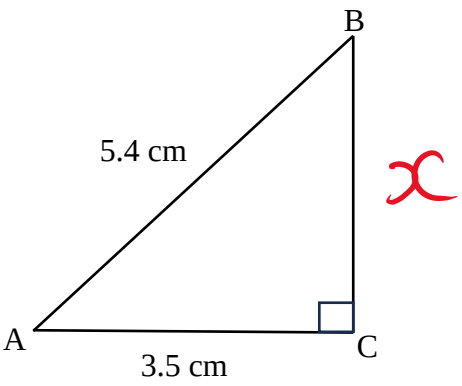
She will get more euros

(1)

(Total for Question 14 is 3 marks)

---

15 The right-angled triangle ABC has been drawn below.
AB = 5.4 cm
AC = 3.5 cm



Work out the length of BC.
Give your answer correct to 2 decimal places.

$3.5^2 + x^2 = 5.4^2$

$12.25 + x^2 = 29.16$

$x^2 = 16.91$

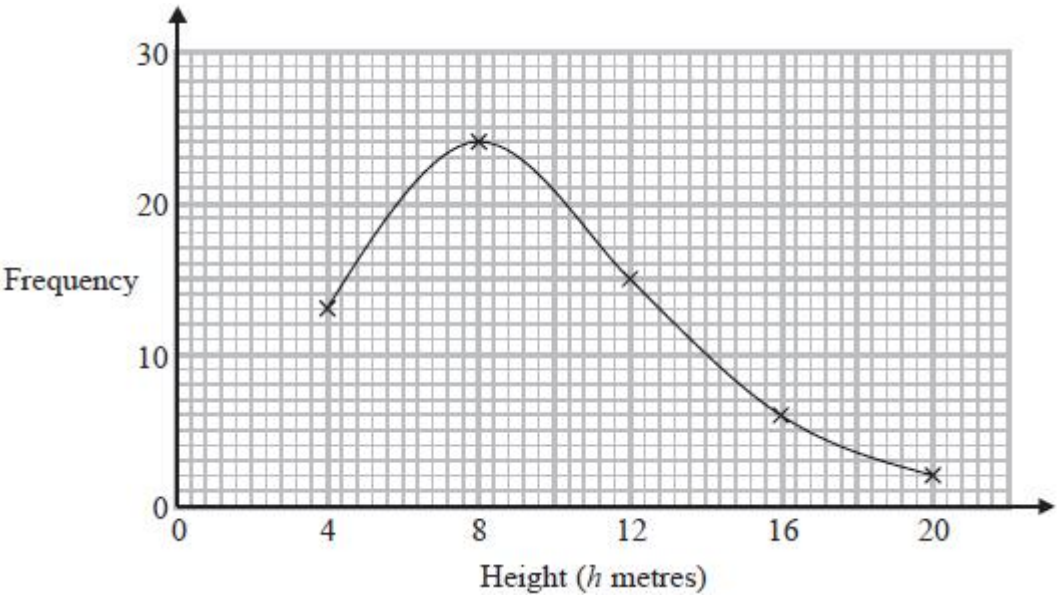
$x = 4.11$

(Total for Question 15 is 2 marks)

16 The table shows the heights of 60 trees

Height (h metres)	Frequency
$0 < h \leqslant 4$	13
$4 < h \leqslant 8$	24
$8 < h \leqslant 12$	15
$12 < h \leqslant 16$	6
$16 < h \leqslant 20$	2

Freddie plots the frequency polygon below



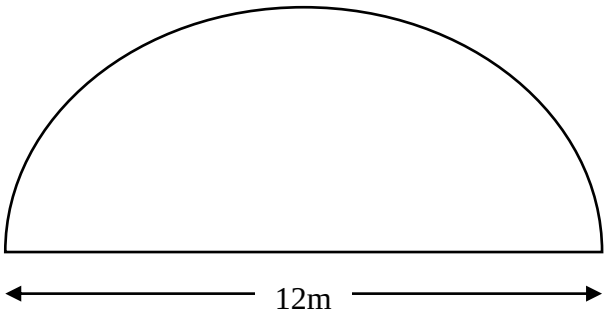
Write down 2 things that are wrong with this graph

1. The lines should be straight

2. She used the end point not the midpoint

(Total for Question 16 is 2 marks)

17 Mr Bennett's garden is in the shape of a semi-circle.
The diameter of the semi-circle is 12 metres.



He is going to cover 46% of the garden with flowers.

The remainder of the garden will be covered with grass seeds

A box of grass seeds covers $4m^2$ and costs £5.99

Work out the total cost of the grass seeds to cover the remainder of his garden.

$\frac{\pi \times 6^2}{2} = 18\pi$

54% of $18\pi = 30.536 m^2$

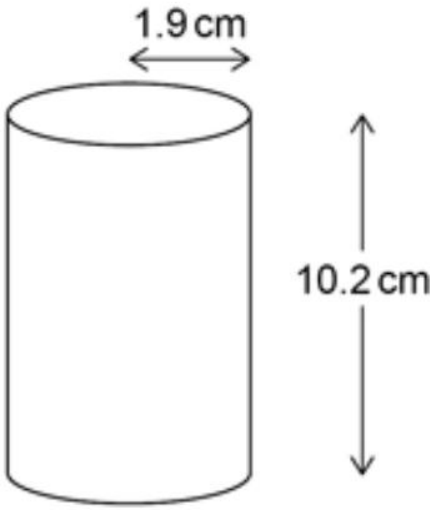
$\frac{30.536}{4} = 7.634$ (8 boxes)

$8 \times £5.99 = £47.92$

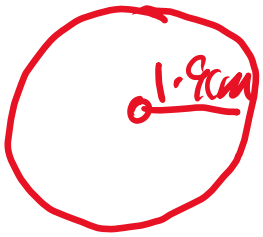
£ .....

(Total for Question 17 is 5 marks)

18 The diagram shows a cylinder.

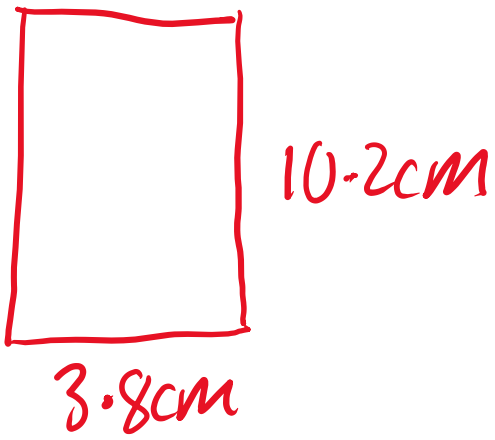


(a) Draw the plan of the cylinder, labelling any dimensions.



(1)

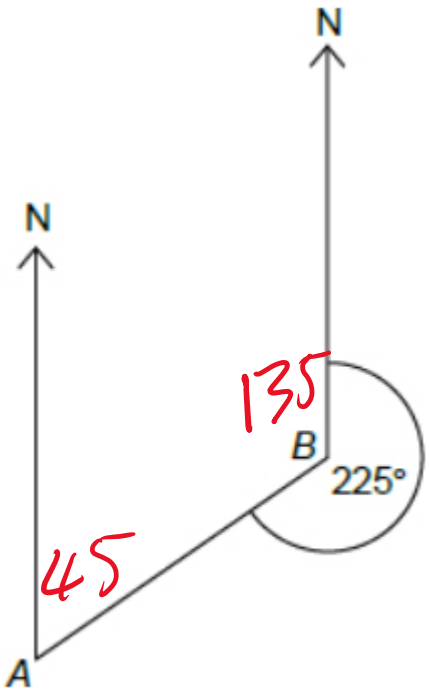
(b) Draw the side elevation of the cylinder, labelling any dimensions.



(2)

(Total for Question 18 is 3 marks)

19 The bearing of A from B is 225°



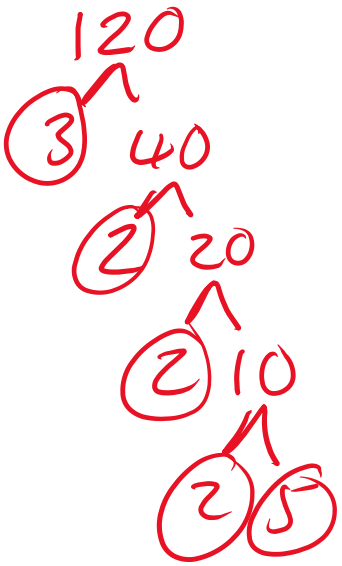
Work out the bearing of B from A

045 °

(Total for Question 19 is 3 marks)

20

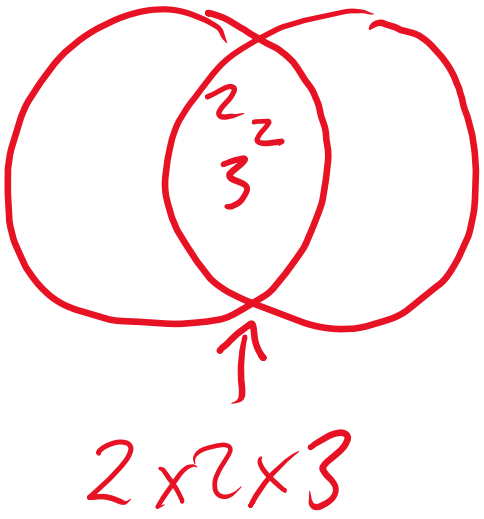
(a) Express 120 as a product of primes



$2^3 \times 3 \times 5$

(2)

(b) Hence, or otherwise, find the highest common factor (HCF) of 120 and 84



12

(2)

(Total for Question 20 is 4 marks)

21

Solve algebraically

$3x + 2y = 9.5$ ×5
$7x - 5y = 41.5$ ×2

$15x + 10y = 47.5$
$+ 14x - 10y = 83$
$29x = 130.5$
$x = 4.5$

$3(4.5) + 2y = 9.5$
$13.5 + 2y = 9.5$
$2y = -4$
$y = -2$

(Total for Question 21 is 4 marks)

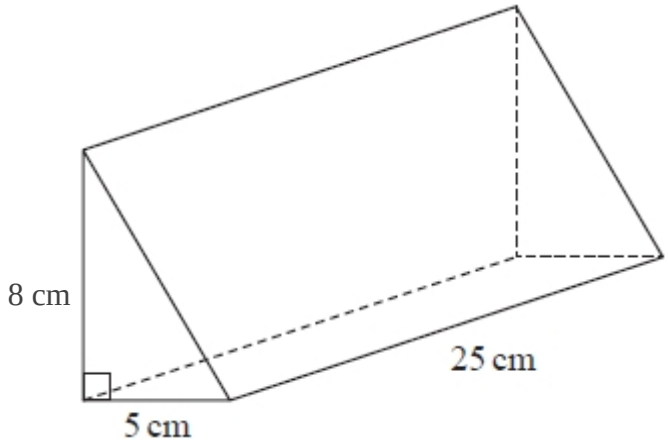
22

A number, n, is rounded to 2 significant figures.
The result is 2.3
Complete the error interval for n

$2.25 \leq n < 2.35$

(Total for Question 22 is 2 marks)

23
The diagram shows a prism.



The cross section of the prism is a right-angled triangle.

The base of the triangle has length 5 cm

The prism has length 25 cm

The mass of the prism is 250g.

Work out the density of the prism.

$\frac{8 \times 5}{2} \times 25 = 500 cm^3$

$250g : 500 cm^3$

$0.5g : 1 cm^3$

$0.5 g/cm^3$

(Total for Question 23 is 3 marks)

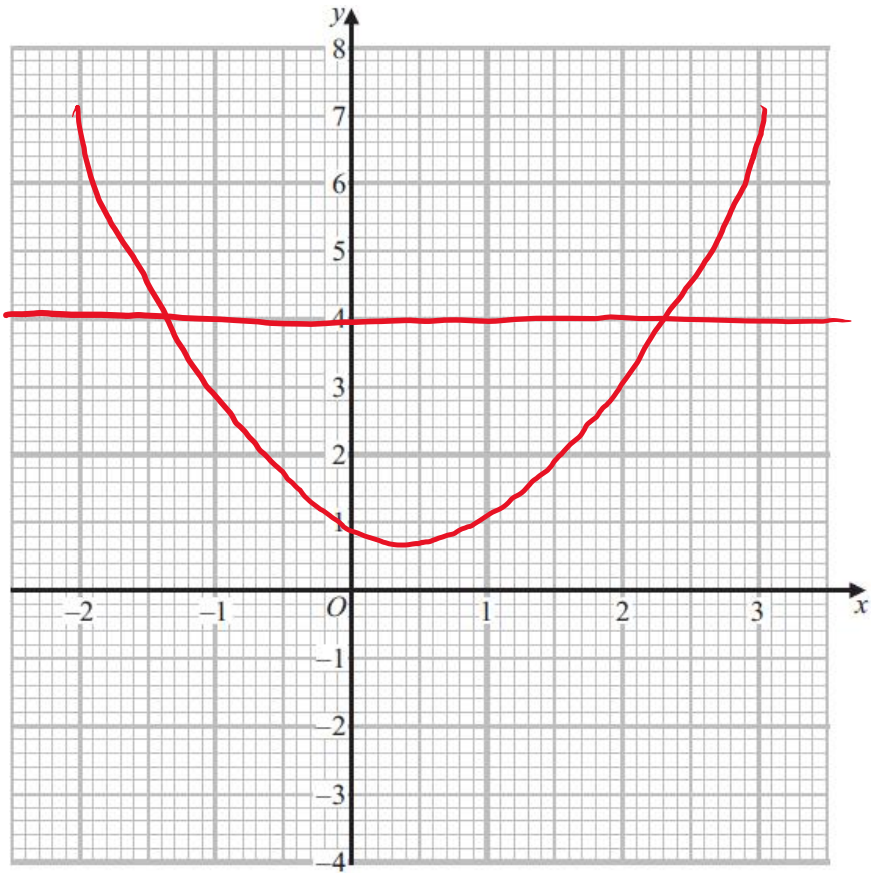
24

(a) Complete the table of values for $y = x^2 - x + 1$ for values of x from -2 to 3

x	-2	-1	0	1	2	3
y	7	3	1	1	3	7

(2)

(b) Draw the graph of $y = x^2 - x + 1$



(2)

(c) Estimate the solutions of $4 = x^2 - x + 1$

$y = 4$

$x = -1.4$
$x = 2.3$

(2)

(Total for Question 24 is 6 marks)

25

Sam invests £3500 into a bank account paying 5.4% compound interest, per annum, for 3 years.

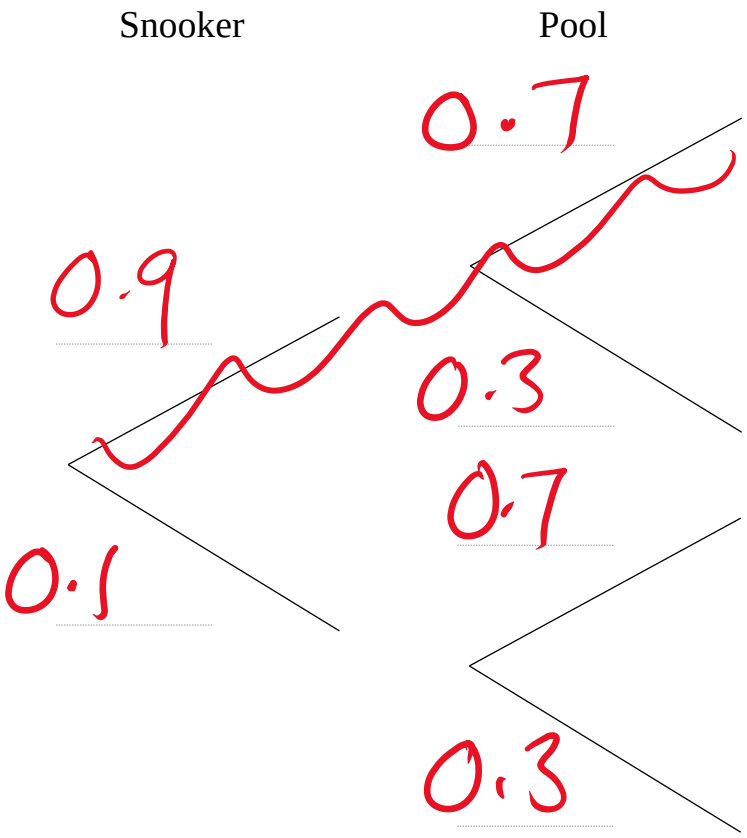
Work out the total amount of interest gained after 3 years.

$3500 \times 1.054^3 = 4098.16$

$4098.17 - 3500 = 598.16$

(Total for Question 25 is 3 marks)

26(a) Margot is going to play one game of snooker and one game of pool.
The probability that Margot wins a game of snooker is 0.9.
The probability that Margot does not win a game of pool is 0.3.



(2)

(b) Work out the probability that Margot wins at both snooker and pool.

$0.9 \times 0.7 = 0.63$

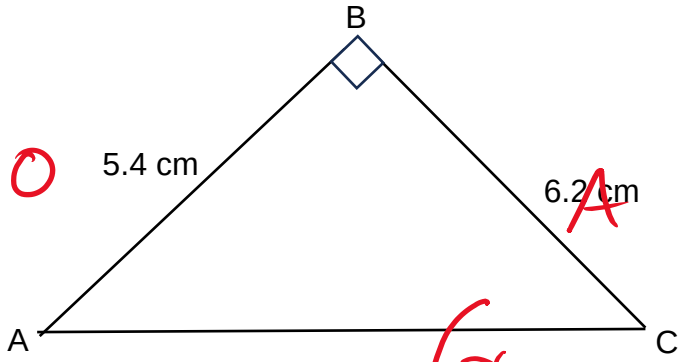
(2)

(Total for Question 26 is 4 marks)

27 The right-angled triangle ABC has been drawn below.

AB = 5.4 cm

BC = 6.2 cm



Work out the size of angle BCA.

Give your answer correct to 3 significant figures.

$\tan(x) = \frac{5.4}{6.2}$ $x = \tan^{-1}\left(\frac{5.4}{6.2}\right)$

41.1

(Total for Question 27 is 3 marks)

---

28 $A = \begin{pmatrix} 4 \\ -1 \end{pmatrix}$ $B = \begin{pmatrix} -2 \\ 5 \end{pmatrix}$

(a) Work out the column vector that represents 3A

$3\begin{pmatrix} 4 \\ -1 \end{pmatrix} = \begin{pmatrix} 12 \\ -3 \end{pmatrix}$

(1)

(b) Work out the column vector that represents 2A + 3B

$2A = \begin{pmatrix} 8 \\ -2 \end{pmatrix}$ $3B = \begin{pmatrix} -6 \\ 15 \end{pmatrix}$ $\begin{pmatrix} 8 \\ -2 \end{pmatrix} + \begin{pmatrix} -6 \\ 15 \end{pmatrix} = \begin{pmatrix} 2 \\ 13 \end{pmatrix}$

(3)

(Total for Question 28 is 4 marks)