

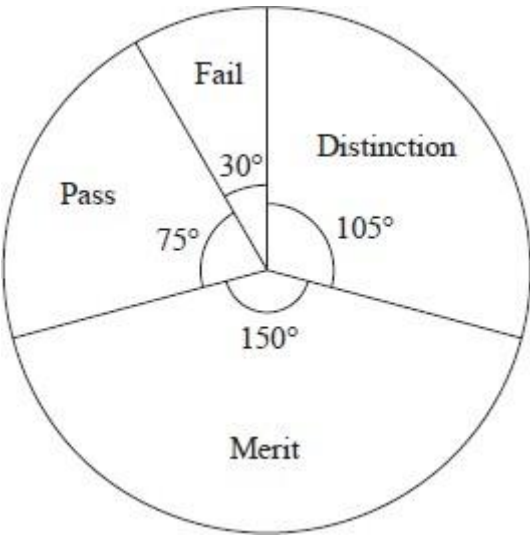
Pearson
Edexcel

Name: _____

BennettMaths Edexcel 3F – Part 2

12 Some students took a piano exam.

The pie chart shows information about the grades the students got.



(a) Write down the modal grade.

.....
(1)

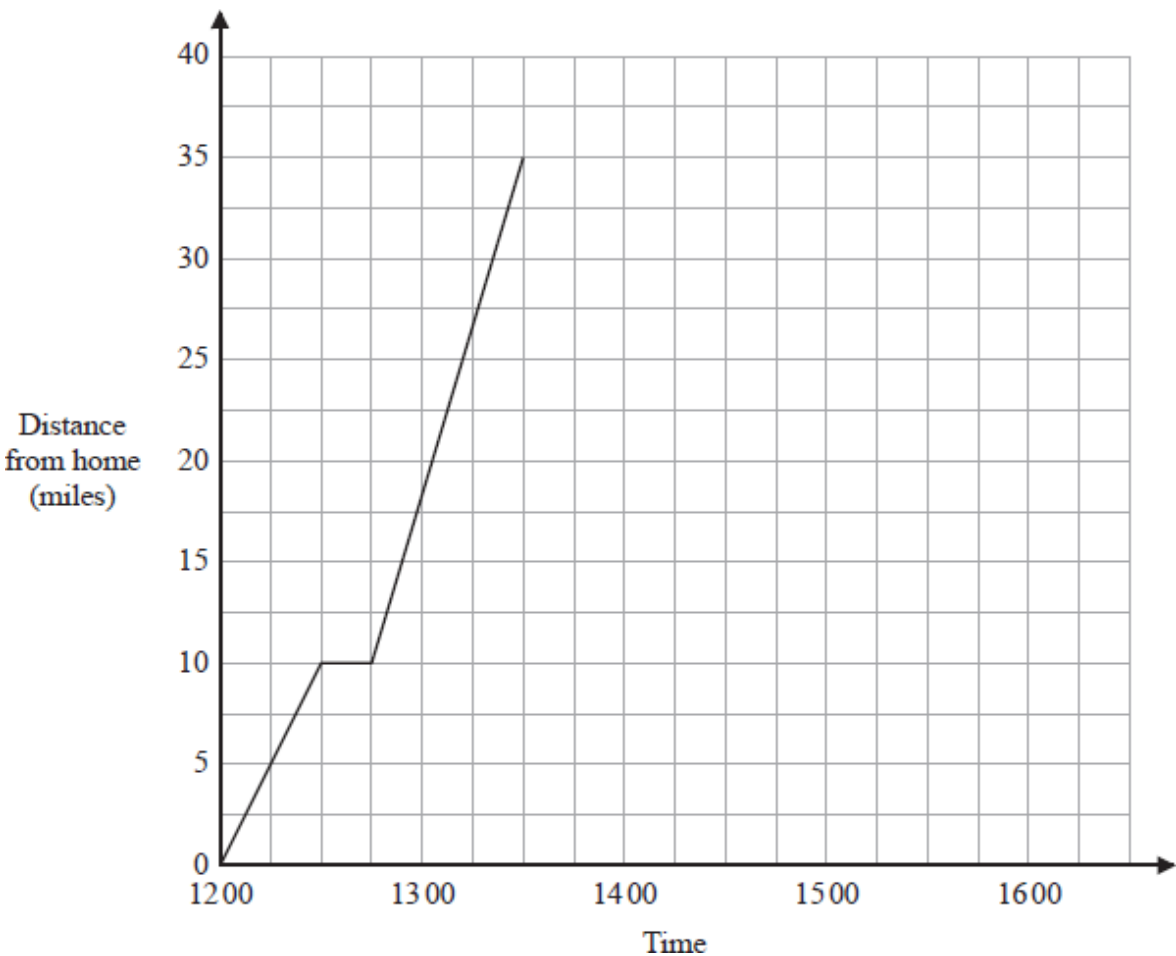
30 students got merit.

(b) Work out the total number of students who took the piano exam.

.....
(3)

(Total for Question 12 is 4 marks)

13 Rosalind drove from her home to a hospital.
Here is a travel graph for her journey.



Rosalind stopped at a shop on her way to the hospital.

(a) (i) How many minutes did Rosalind take to drive to the shop?

..... minutes
(1)

(ii) Write down the distance from Rosalind's home to the shop.

..... miles
(1)

Rosalind stayed at the hospital for 1 hour.
She then drove home without stopping.
Rosalind arrived home at 16 15

(b) On the grid, complete the travel graph.

(2)

(c) Work out the average speed for the journey from the hospital to Rosalind's home.

..... miles per hour

(1)

(Total for Question 13 is 5 marks)

14 280 exercise books cost £70
320 pens cost £110

An exercise book is cheaper than a pen.

How much cheaper?

Give your answer in pence correct to 1 decimal place.

.....p

(Total for Question 14 is 4 marks)

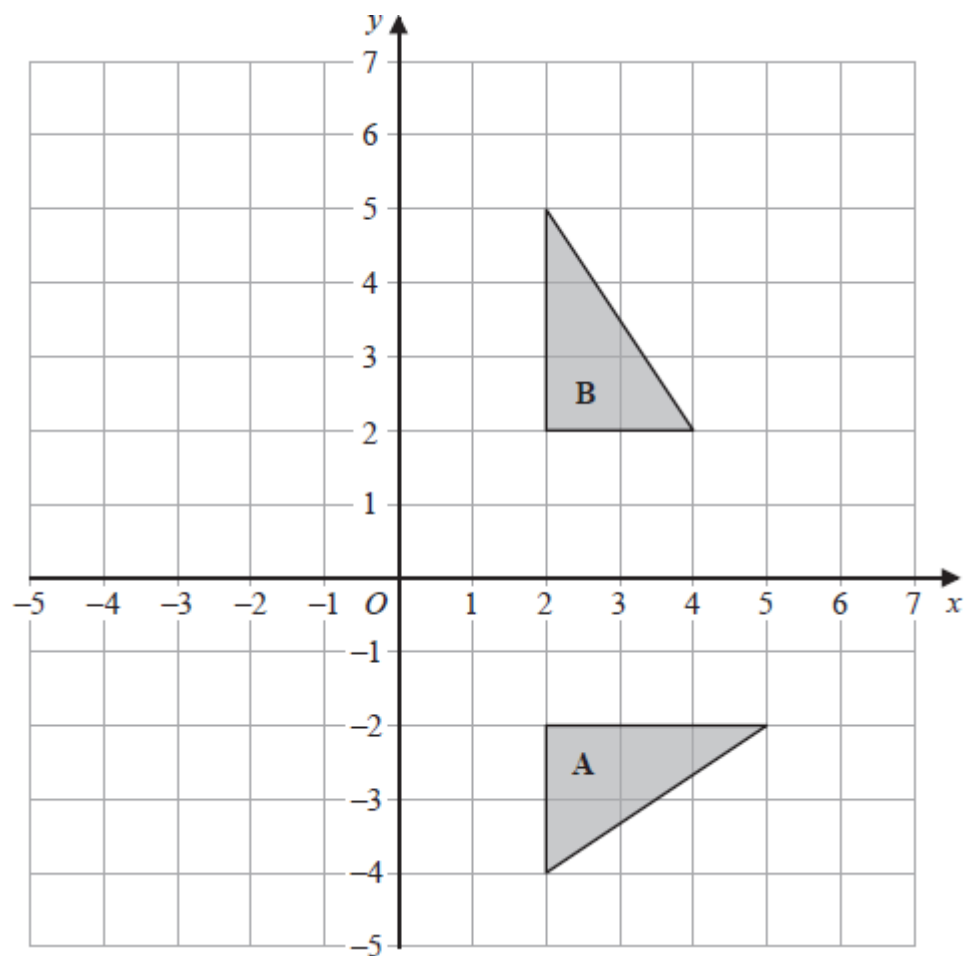
15 There are only blue beads and yellow beads in a box.

number of blue beads : number of yellow beads = 2 : 3

There are 42 blue beads in the box.

Work out the total number of beads in the box.

.....
(Total for Question 15 is 2 marks)



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

.....

.....

.....

(Total for Question 16 is 2 marks)

- 17** The diagram shows the position of a phone mast T .



Phone mast P is 35 km from phone mast T on a bearing of 105°

Mark the position of phone mast P with a cross (\times).

Use a scale of 1 cm to 5 km.

(Total for Question 17 is 2 marks)

18 Solve $5(3x - 7) = 40$

$x = \dots\dots\dots$

(Total for Question 18 is 3 marks)

- 19** Julia invests £5000 for 4 years at $S\%$ simple interest per year.
At the end of the 4 years, Julia has received a total of £700 in interest.
Work out the value of S .

$S = \dots\dots\dots$

(Total for Question 19 is 3 marks)

20 (a) Simplify $(k^3)^4$

.....
(1)

(b) Simplify $y^6 \times y^9$

.....
(1)

(c) Expand $5m^2(m^2 + 2m)$

.....
(2)

(Total for Question 20 is 4 marks)
