

18 The table gives information about the number of trees in each of 20 gardens.

Number of trees	Frequency
0	2
1	7
2	3
3	4
4	3
5	1

Work out the total number of trees in these gardens.

.....
(Total for Question 18 is 2 marks)

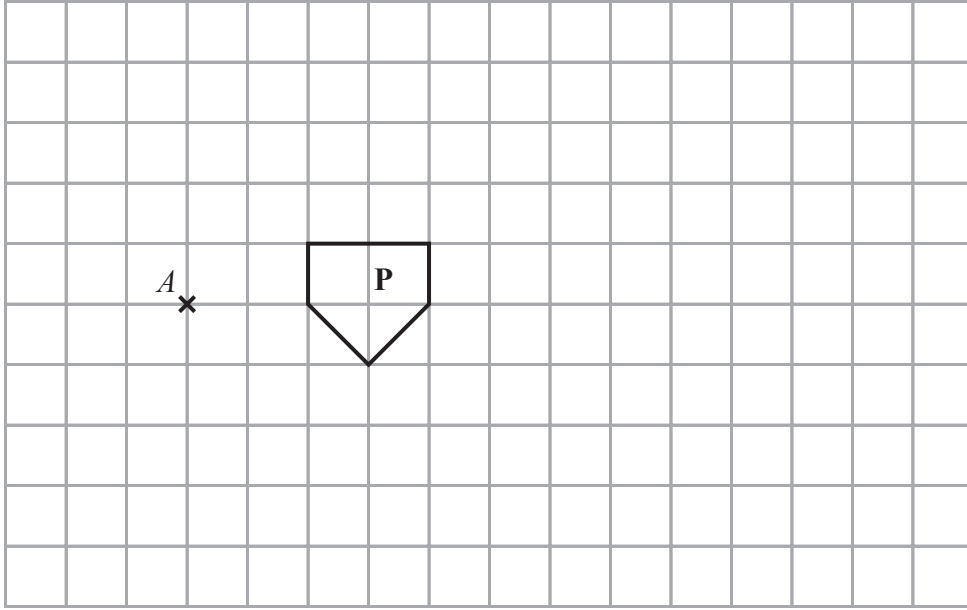
19 Charlotte earns £8.50 per hour.
She gets a pay rise of 6%

Work out how much Charlotte earns per hour after her pay rise.

£.....

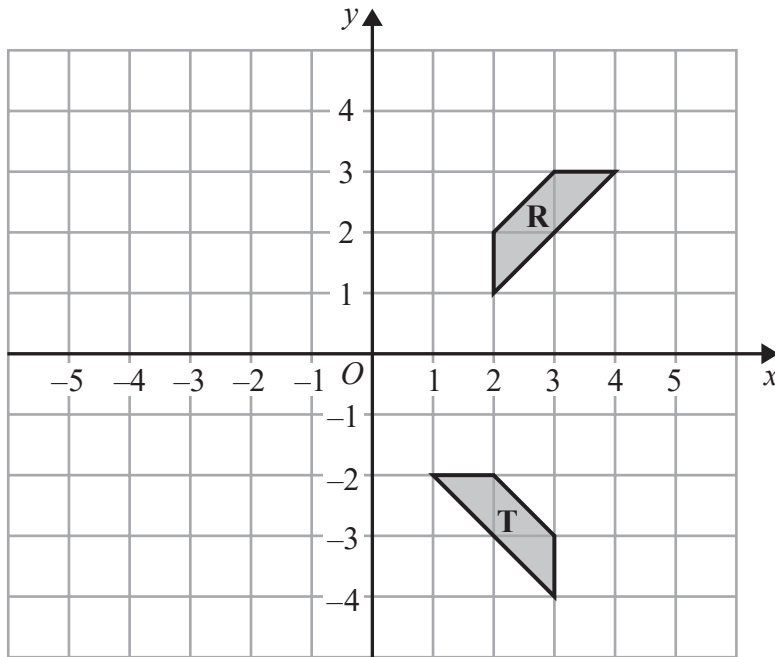
(Total for Question 19 is 3 marks)





(a) On the grid, enlarge shape **P** with scale factor 3 and centre *A*.

(2)



(b) Describe fully the single transformation that maps shape **R** onto shape **T**.

(3)

(Total for Question 20 is 5 marks)

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21 Solve the simultaneous equations

$$\begin{aligned}y &= 4x \\ 7x - y &= -13.5\end{aligned}$$

Show clear algebraic working.

$x = \dots\dots\dots$

$y = \dots\dots\dots$

(Total for Question 21 is 3 marks)

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22 A , B and C are three cities.

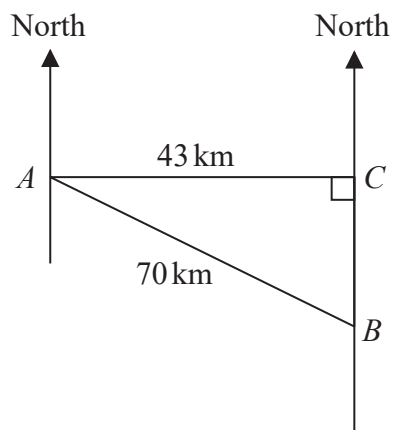


Diagram **NOT** accurately drawn

City C is due east of city A and due north of city B .
City A is 43 km from city C and 70 km from city B .

Work out the bearing of city B from city A .
Give your answer correct to the nearest degree.

.....
(Total for Question 22 is 4 marks)



23 (a) Simplify $m^7 \times m^4$

.....
(1)

(b) Simplify $(3a^2b^4)^3$

.....
(2)

(c) Expand and simplify $4(g - 2h) + 5(2g - 3h)$

.....
(2)

(d) Expand and simplify $(y - 7)(y + 5)$

.....
(2)

(Total for Question 23 is 7 marks)



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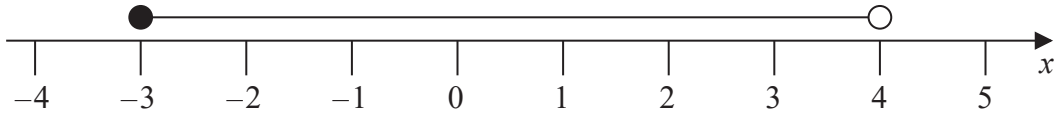
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24 Write 280 as a product of its prime factors.
Show your working clearly.

.....
(Total for Question 24 is 3 marks)



25



An inequality in x is shown on the number line.

(a) Write down this inequality.

.....
(2)

(b) Solve the inequalities $-5 \leq 2p + 3 < 13$

.....
(3)

(Total for Question 25 is 5 marks)

TOTAL FOR PAPER IS 100 MARKS

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