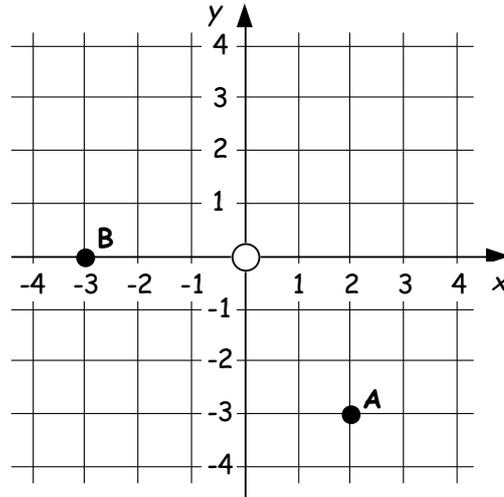


NAB 2 - (Practice)

Outcome 1 - Integers

1. a State the coordinates of the points A and B in the diagram shown.



(2)

b **Copy** the diagram and plot and label the two points J(-3, 4) and K(-2, -4).

(2)

2. Three horses got to the finals of the county fairs jumping competition. There were 3 rounds where points were given for jumping fences and points deducted for fences knocked down.

The points scored are shown in the table.

	Round			Total
	R1	R2	R3	
Alco	6	-7	-9	-10
Bento	-5	4	6
Chico	-9	5	0

a What was the **total** scored by Bento ?

(1)

b What was the **total** scored by Chico ?

(1)

c A 4th horse, Delilah, scored a total of 4. By how much did Delilah beat Alco ?

(1)

required to pass - $\frac{5}{7}$

Outcome 2 - Time, Distance, Speed

3. The graph shows Tina's journey to the coast. She stopped off for shopping along the way.

a How far did Tina travel before stopping for shopping ?

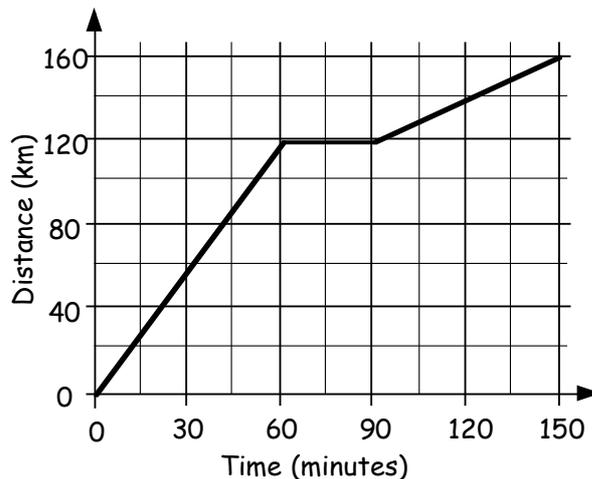
(1)

b How long did her shopping last ?

(1)

c How can you tell from just looking at the graph that the average speed for the first part of Tina's journey was greater than the average speed for the second part ?

(1)



4. A cyclist travels at a speed of 20 miles per hour for 3 hours.

Find the distance travelled by the cyclist.



(2)

5. A jet flies for 650 kilometres at a speed of 260 kilometres per hour.

How long does the flight take ?

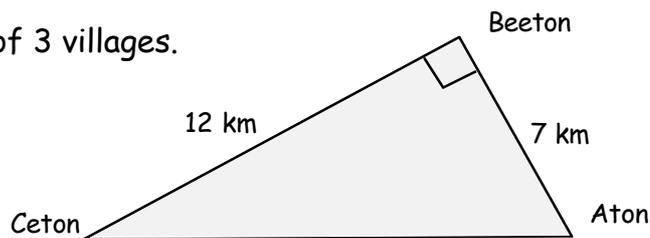


(2)

required to pass - $\frac{5}{7}$

Outcome 3 - Pythagoras' Theorem

6. The diagram shows the position of 3 villages.



Calculate the distance from Ceton to Aton.

(3)

required to pass - $\frac{2}{3}$

Outcome 4 - Graphs, Charts and Tables

7. Sixteen young trees were fed a special fertiliser for 3 months. The height gained in centimetres for each tree was recorded.

12	11	24	45	19	22	9	13
41	8	18	17	15	34	45	17

- a Write down the minimum and the maximum height gained.
- b **Copy** the stem-and-leaf diagram, and complete it.
Include a key for the diagram.
- c Comment on what the stem-and-leaf diagram shows.

0	COPY
1	
2	
3	
4	

(1)

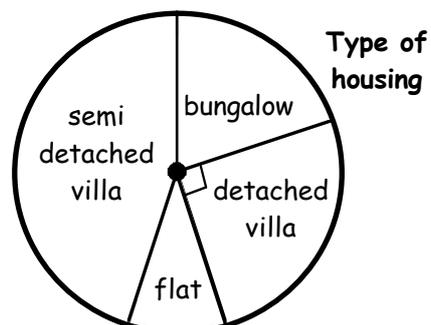
(3)

(1)

8. Last month, 160 houses were sold in Angus.

The pie-chart shows what type of houses were sold.

How many houses were detached villas ?



(2)

9. A computer program simulates rolling a dice.
Here are the scores produced by the computer.

4	3	1	6	1	3	4	5	3	4
5	2	3	4	6	3	2	4	4	3

- a **Copy** this frequency table for these results and complete it.
- b The computer is expected to produce approximately equal numbers of each score.
Comment on how well the computer appears to be doing its job.

SCORE	Tally	Frequency
COPY		
		Total =

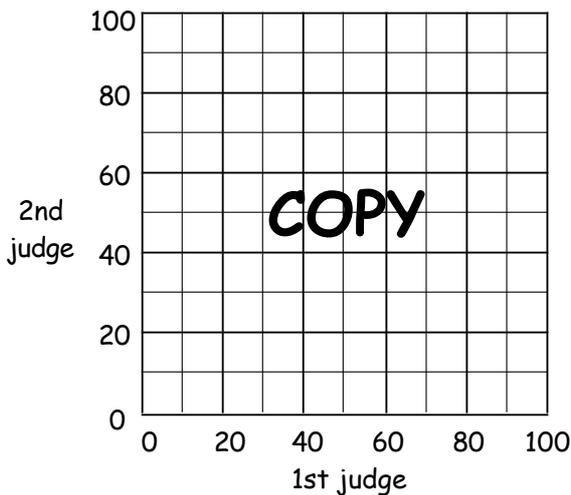
(4)

(1)

10. Two judges were marking skaters in an ice skating competition.
Here are the scores for 6 skaters.

Skater	1st judge	2nd judge
Andrew	85	45
Belinda	65	32
Caren	65	35
Darren	17	15
Edward	93	40
Frances	45	25

- a **Copy** the scattergraph shown and complete it.



- b Draw a best-fitting straight line.

- c Gina was given a mark of 20 by the first judge.

Use your graph to estimate what the 2nd judge might award Gina.

required to pass - 11/16

(2)

(1)

(1)

Outcome 5 - Use Simple Statistics

11. Look at this set of test scores. (54 45 52 42 47 50 56 49 46 49 57 41)

- a Calculate the **mean** score.
- b Calculate the **median** score.
- c Calculate the **modal** score.
- d Calculate the **range**.

(3)

(1)

(1)

(1)

12. Four coloured pens (red, blue, green and black) are placed in a bag.

What is the **probability** of picking, at random, a red pen?

(1)

required to pass - 5/7