

1 $V = \frac{k}{H}$ where k is a constant.

Which **two** statements are correct?

Tick **two** boxes.

[1 mark]

☐

V is directly proportional to H

☐

V is inversely proportional to H

☐

V is directly proportional to $\frac{1}{H}$

☐

V is inversely proportional to $\frac{1}{H}$

Answer _____

3 L is directly proportional to D^2

$L = 85$ when $D = 10$

3 (a) Work out an equation connecting L and D .

[3 marks]

Answer _____

3 (b) Work out the value of L when $D = 5$

[2 marks]

Answer _____

4 (a) G is directly proportional to the square root of H .

$G : H = 3 : 2$ when $H = 16$

Work out $G : H$ when $H = 100$

[4 marks]

Answer _____ :

5 H is inversely proportional to the cube root of L .

$$H = 7 \quad \text{when} \quad L = 64$$

5 (a) Work out an equation connecting H and L .

[3 marks]

Answer _____

5 (b) Work out the value of H when $L = 2744$

[2 marks]

$H =$ _____

- 6
- A chef has a tub of blueberries.

She wants to

 - use all the blueberries
 - put the same number of blueberries on each dessert.

$$D = \frac{k}{b}$$

D is the number of desserts.

b is the number of blueberries on each dessert.

- 6 (a)
- Complete the table.

[2 marks]

b	2	6	
D	120		30

$$R =$$