Addition and Subtraction: **Completing Tables and Frequency Diagrams**
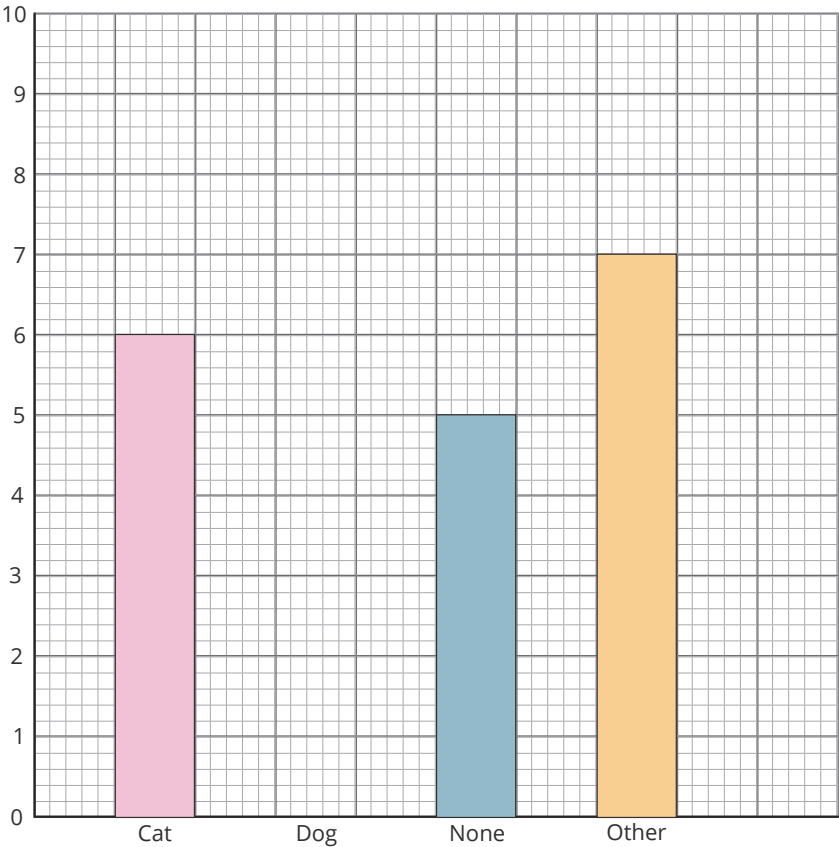
1. a. Kayla is sorting her nail varnishes by colour. She records the colours in a tally chart. Complete the table and calculate the total number of nail varnishes in her collection.

Colour	Tally	Frequency
Red	‖‖ ‖	7
Pink	‖‖ ‖‖	
Blue	‖‖ ‖‖	
Green		3
Black	‖‖ ‖‖	
Other		13
Total		

b. Kayla gives her sister, Brooke, two red and three pink nail varnishes for her pamper party. Kayla then receives three nail varnishes in her favourite colour (blue), as presents. Represent the number of nail varnishes now owned by Kayla in the table.

Colour	Tally	Frequency
Red		
Pink		
Blue		
Green		
Black		
Other		
Total		

2. The bar chart represents the number of pets owned by children in class 7A. Complete the bar chart and the table to represent this information.

Pet	Frequency
Cat	6
Dog	
None	
Other	
Total	26

3. Year seven hold a charity cake sale. The total cakes sold, by each class, in the sale are represented in the pictogram. Complete the table to calculate the total number of cakes sold in the charity cake sale.

 = 12 cakes sold.

Class	Cakes Sold	Frequency
7A		
7B		
7C		
7D		
7E		
Total		

4. The two-way table shows the ownership of laptops for years seven and eight. Fill in the missing values in the table.

	Laptop	No Laptop	Total
Year 7	55	70	
Year 8		56	
Total	114		240

a. How many students are in year 7?

_____

b. How many year 8 students own a laptop?

_____

c. How many students, in total, do not own a laptop?

_____

Challenge

Year seven were asked to choose their favourite PE lesson out of the sports shown in the table. Construct an accurate pie chart to show this information. You should show your workings.
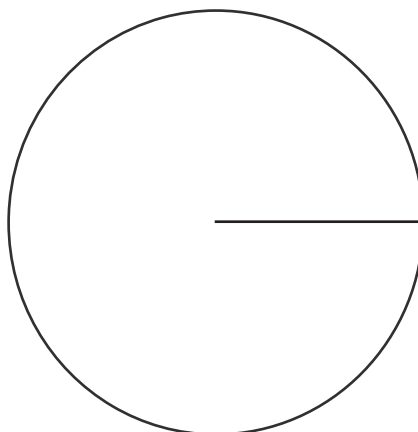
Sport	Frequency	Angle
Football	40	
Rugby	20	
Netball	25	
Hockey		
Total	120	

_____

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_____

Addition and Subtraction: **Completing Tables and Frequency Diagrams**
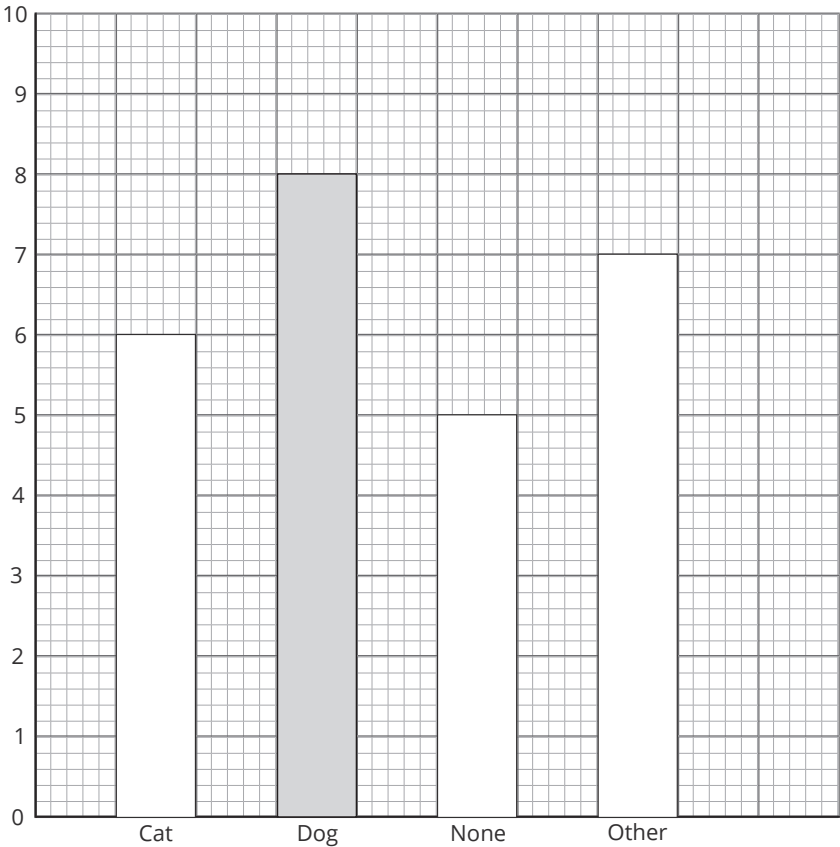
Answers

1. a. Kayla is sorting her nail varnishes by colour. She records the colours in a tally chart. Complete the table and calculate the total number of nail varnishes in her collection.

Colour	Tally	Frequency
Red	ЦЦ ‖	7
Pink	ЦЦ ЦЦ	**10**
Blue	ЦЦ ‖‖	**8**
Green	‖‖	3
Black	ЦЦ ‖‖‖	**9**
Other	ЦЦ ЦЦ ‖‖	13
Total		**50**

b. Kayla gives her sister, Brooke, two red and three pink nail varnishes for her pamper party. Kayla then receives three nail varnishes in her favourite colour (blue), as presents. Represent the number of nail varnishes now owned by Kayla in the table.

Colour	Tally	Frequency
Red	ЦЦ	5
Pink	ЦЦ ‖	7
Blue	ЦЦ ЦЦ ‖	11
Green	‖‖	3
Black	ЦЦ ‖‖‖	9
Other	ЦЦ ЦЦ ‖‖	13
Total		48

2. The bar chart represents the number of pets owned by children in class 7A. Complete the bar chart and the table to represent this information.

Pet	Frequency
Cat	6
Dog	**8**
None	**5**
Other	**7**
Total	26

A bar of height 8 should be seen in the dog column.
26 – (6 + 5 + 7) = 8

3. Year seven hold a charity cake sale. The total cakes sold, by each class, in the sale are represented in the pictogram. Complete the table to calculate the total number of cakes sold in the charity cake sale.

 = 12 cakes sold.

Class	Cakes Sold	Frequency
7A		**12**
7B		**12 + 6 = 18**
7C		**12 + 12 + 3 = 27**
7D		**12 + 9 = 21**
7E		**12 + 12 + 6 = 30**
Total		**108**

4. The two-way table shows the ownership of laptops for years seven and eight. Fill in the missing values in the table.

	Laptop	No Laptop	Total
Year 7	55	70	**125**
Year 8	**59**	56	**115**
Total	114	**126**	240

a. How many students are in year 7?

55 + 70 = 125

b. How many year 8 students own a laptop?

114 – 55 = 59

c. How many students, in total, do not own a laptop?

240 – 114 = 126 or 70 + 56 = 126

Challenge

Year seven were asked to choose their favourite PE lesson out of the sports shown in the table. Construct an accurate pie chart to show this information. You should show your workings.

Sport	Frequency	Angle
Football	40	**40 × 3 = 120°**
Rugby	20	**20 × 3 = 60°**
Netball	25	**25 × 3 = 75°**
Hockey	**35**	**35 × 3 = 105°**
Total	120	**360°**

120 – (40 + 20 + 25) = 35

360 ÷ 120 = 3