1) a) $\frac{2}{4}$ of 8 is 4.   **b)** $\frac{3}{4}$ of 8 is 6.
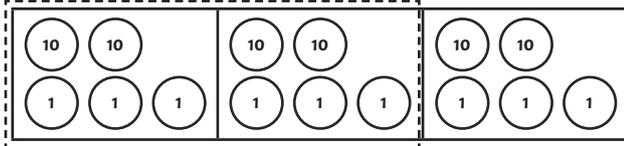
2) $\frac{2}{7}$ of the footballs is 4.

3) a) $\frac{2}{3}$ of 15 is 10.   **b)** $\frac{3}{8}$ of 16 is 6.

4) $\frac{2}{3}$ of 69 is 46.

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1) If 18 chairs represent $\frac{2}{3}$ of the chairs, then dividing this amount by 2 would calculate $\frac{1}{3}$ of the chairs.

| 9 chairs | 9 chairs | 9 chairs |

18 ÷ 2 = 9

To find $\frac{3}{3}$, the amount of chairs altogether, multiply $\frac{1}{3}$ by 3.

9 × 3 = 27

There were 27 chairs set out for assembly.

2) a) $\frac{1}{3}$ of 15 = 5

15 − 5 = 10

Therefore, Tariq was left with £10 on Monday.

b) As Tariq spent $\frac{1}{3}$ of his money, he will be left with $\frac{2}{3}$ of the original amount.

c) $\frac{1}{2}$ of 10 = 5

Therefore, Tariq had £5 left on Tuesday.

3)

| 40 | 40 |

$\frac{1}{2}$ of 80 is 40.

80 ÷ 2 = 40

Anya has read 40 pages of the book.

| 16 | 16 | 16 | 16 | 16 |

$\frac{1}{5}$ of 80 is 16. $\frac{2}{5}$ of 80 is 32.

80 ÷ 5 = 16

16 × 2 = 32

Tina has read 32 pages of the book.

40 is 8 more than 32. Therefore, Anya has read the greater amount of the book.

1) **Reception:**
   $\frac{1}{3}$ **of 60 is 20. 60 ÷ 3 = 20**
   Reception were given 20 glue sticks.

20 glue sticks	20 glue sticks	20 glue sticks

Year 1:
$\frac{2}{6}$ **of 60 is 20.**
60 ÷ 6 = 10
10 × 2 = 20
Year 1 were given 20 glue sticks.

10 glue sticks	10 glue sticks	10 glue sticks	10 glue sticks	10 glue sticks	10 glue sticks

40 glue sticks were given to reception and year 1.

Year 2:
60 – 40 = 20
Year 2 were given 20 glue sticks.

Each class was given 20 glue sticks. Therefore, Rachel is wrong.

2) **This is not true.**

$\frac{2}{5}$ of 20 = 8	$\frac{2}{5}$ of 40 = 16	$\frac{4}{8}$ of 24 = 12	$\frac{4}{8}$ of 40 = 20
$\frac{2}{5}$ of 30 = 12	$\frac{2}{5}$ of 50 = 20	$\frac{4}{8}$ of 32= 16	$\frac{4}{8}$ of 48 = 24

The answers show that only $\frac{2}{5}$ of 20 gives a smaller answer. Three of the answers are the same.

3) **Kirk is incorrect. Although most of the answers are multiples of 4, some of them are not.**
   The following answers are multiples of 4:

$\frac{1}{4}$ of 48 is 12.	$\frac{2}{8}$ of 48 is 12.	$\frac{2}{6}$ of 48 is 16.
$\frac{1}{2}$ of 48 is 24.	$\frac{2}{3}$ of 48 is 32.	$\frac{1}{12}$ of 48 is 4.

The following answers are not multiples of 4:

$\frac{3}{8}$ **of 48 is 18.**

$\frac{1}{8}$ **of 48 is 6.**