

Name	
Form	
Teacher	

**Maths**

**Homework Booklet**

**Year 8 Summer 2**

**Set 1,2,3**

Topic	Score achieved	Sparx %
1: Revision	/10	%
2: Revision	/10	%
3: Lines of Symmetry	/6	%
4: Pictograms	/16	%
5: Bar Charts	/14	%
6: Mean from frequency table	/18	%
7: Estimate of the mean from frequency table	/12	%



## Week 1

- 1 Expand and simplify  $5(4x + 9) + 4(7x + 1)$
- 2 Calculate  $3843 \div 7$
- 3 Calculate  $24000 \div 20$
- 4 Complete :  $6\text{ l} = \underline{\hspace{2cm}}\text{ cl}$
- 5 Calculate  $8.3 \times 7.5$
- 6 Round  $6.352$  correct to 1 decimal place
- 7 Solve  $3(5x - 7) = -6$
- 8 Work out  $10 \times (3 + 4) \times 5$
- 9 Evaluate  $3^3$
- 10 Calculate  $\frac{4}{5}$  of  $\pounds 85$

Sparx – Homework Answers



## Week 2

- 1 Expand and simplify  $5(6x + 7) + 2(5x + 1)$
- 2 Calculate  $5949 \div 9$
- 3 Calculate  $300 \div 50$
- 4 Complete :  $60 \text{ ml} = \underline{\hspace{2cm}} \text{ cl}$
- 5 Calculate  $5.2 \times 3.1$
- 6 Round  $0.6323$  correct to 2 decimal places
- 7 Solve  $4(5x + 2) = 128$
- 8 Work out  $6 \times 5 + 2 \times 6$
- 9 Evaluate  $4^2$
- 10 Calculate  $\frac{1}{6}$  of  $\pounds 144$

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## Week 3

Here is an equilateral triangle.

Draw any lines of symmetry on the triangle



Here is a regular pentagon.

Draw any lines of symmetry on the pentagon.

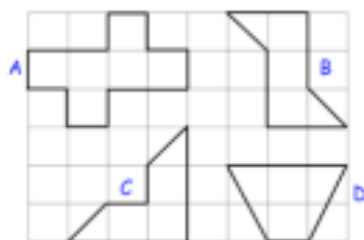


Here is a regular hexagon.

Draw any lines of symmetry on the hexagon.

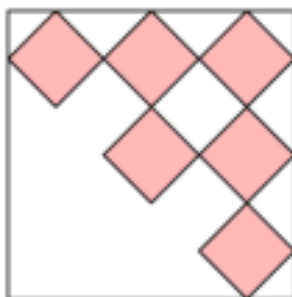


Which two shapes have a line of symmetry?



This square tile has a symmetrical pattern.

Draw the line of symmetry.



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## Week 4

Question 4: Draw a pictogram for each of the following tables.  
Use a suitable key.

(a)

Sport	Frequency
Badminton	20
Judo	15
Squash	25
Table Tennis	5

(b)

Day	Cars sold
Monday	6
Tuesday	8
Wednesday	3
Thursday	10
Friday	7

(c)

Position	Players
Goalkeepers	3
Defenders	18
Midfielders	16
Forwards	14



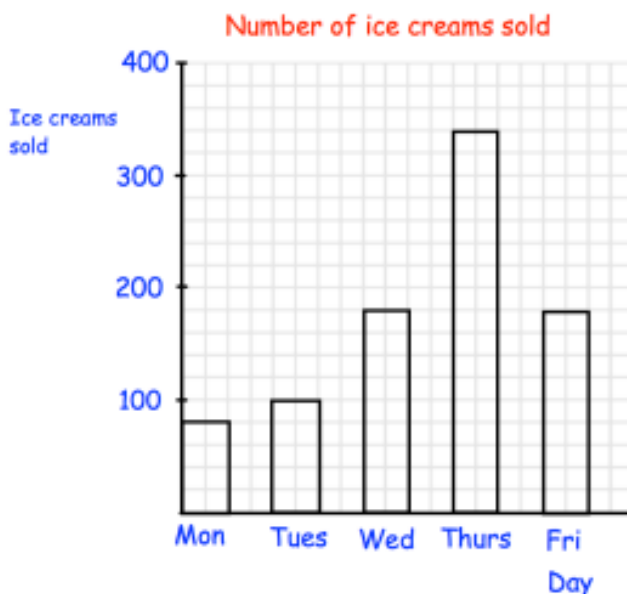
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## Week 5

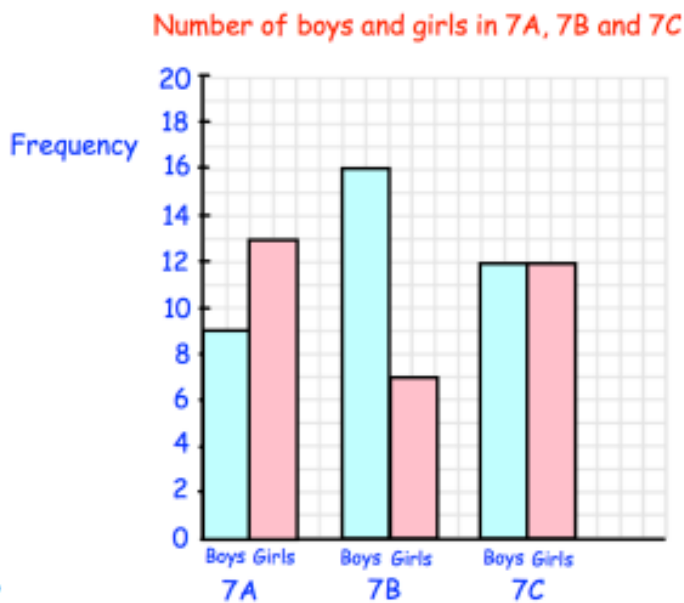
Question 4: The bar chart shows information about the number of ice creams sold in a shop.

- (a) How many ice creams were sold on Tuesday?
- (b) On which day were the least number of ice creams sold?
- (c) Why do you think so many ice creams were sold on Thursday?
- (d) On which two days were the same number of ice creams sold?
- (e) How many ice creams were sold in total?



Question 5: The dual bar chart shows information about the number of boys and girls in three tutor groups, 7A, 7B and 7C.

- (a) How many boys are there in 7B?
- (b) Which tutor group has 12 girls?
- (c) Which tutor group has more girls than boys?
- (d) Which tutor group has the same number of boys and girls?
- (e) Which tutor group has the most students?
- (f) How many more girls than boys are there in 7A?
- (g) How many boys are there in Year 7?
- (h) How many students are there in Year 7?
- (i) Are there more boys or girls in Year 7?



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## Week 6

**Question 1:** Work out the mean for each of these frequency tables.  
You may not use a calculator

(a)

Age	Frequency
5	2
6	2
7	5
8	1

(b)

Number of phones	Frequency
0	1
1	3
2	2
3	0
4	4
5	0

(c)

Number of pets	Frequency
0	13
1	28
2	50
3	9

(d)

Money Withdrawn	Frequency
£10	16
£20	19
£30	4
£40	3
£50	6
£60	2

(e)

Number of bedrooms	Frequency
1	34
2	275
3	512
4	179

(f)

Level	Frequency
3	1
4	9
5	7
6	2
7	1

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# Week7

Question 1: Work out an estimate of the mean for each of these frequency tables.

(a)

Length	Frequency	Midpoint	
$0 < L \leq 10$	6		
$10 < L \leq 20$	7		
$20 < L \leq 30$	5		
$30 < L \leq 40$	1		
$40 < L \leq 50$	1		

(b)

Cost	Frequency	Midpoint	
$0 < c \leq 4$	2		
$4 < c \leq 8$	3		
$8 < c \leq 12$	5		
$12 < c \leq 16$	12		
$16 < c \leq 20$	3		

(c)

Length	Frequency	Midpoint	
$0 < t \leq 5$	11		
$5 < t \leq 10$	37		
$10 < t \leq 15$	43		
$15 < t \leq 20$	9		

(d)

Mass	Frequency	Midpoint	
$50 < m \leq 55$	3		
$55 < m \leq 60$	5		
$60 < m \leq 65$	10		
$65 < m \leq 70$	12		
$70 < m \leq 75$	10		

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