

Name	
Form	
Teacher	

Maths

Homework Booklet

Year 8 Autumn 2

Set P,1,2,3

Topic	Score achieved	Sparx %
1. Multiplying Fractions	/16	%
2. Dividing Fractions	/16	%
3. Coordinates in all four quadrants	/19	%
4. Vertical and horizontal lines	/10	%
5. Drawing lines $y = mx + c$	/16	%
6. Scatter diagrams	/10	%



Week 1

(a) $\frac{1}{2} \times \frac{1}{5}$

(b) $\frac{1}{2} \times \frac{3}{4}$

(c) $\frac{1}{4} \times \frac{3}{5}$

(d) $\frac{1}{3} \times \frac{1}{3}$

(e) $\frac{5}{6} \times \frac{1}{2}$

(f) $\frac{3}{4} \times \frac{1}{4}$

(g) $\frac{2}{3} \times \frac{1}{7}$

(h) $\frac{5}{8} \times \frac{1}{3}$

(i) $\frac{2}{3} \times \frac{1}{2}$

(j) $\frac{1}{3} \times \frac{3}{4}$

(k) $\frac{3}{10} \times \frac{1}{2}$

(l) $\frac{2}{5} \times \frac{1}{4}$

(m) $\frac{2}{7} \times \frac{3}{4}$

(n) $\frac{5}{7} \times \frac{1}{10}$

(o) $\frac{7}{12} \times \frac{2}{3}$

(p) $\frac{6}{7} \times \frac{2}{3}$

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Week 2

(a) $\frac{1}{5} \div \frac{2}{3}$

(b) $\frac{3}{4} \div \frac{4}{5}$

(c) $\frac{1}{2} \div \frac{7}{8}$

(d) $\frac{2}{3} \div \frac{5}{6}$

(e) $\frac{1}{10} \div \frac{4}{9}$

(f) $\frac{6}{11} \div \frac{5}{6}$

(g) $\frac{2}{5} \div \frac{13}{15}$

(h) $\frac{3}{8} \div \frac{7}{9}$

(i) $\frac{3}{5} \div \frac{1}{2}$

(j) $\frac{7}{9} \div \frac{2}{3}$

(k) $\frac{8}{15} \div \frac{7}{10}$

(l) $\frac{9}{10} \div \frac{1}{3}$

(m) $\frac{5}{6} \div \frac{3}{4}$

(n) $\frac{13}{20} \div \frac{8}{11}$

(o) $\frac{4}{17} \div \frac{3}{16}$

(p) $\frac{5}{7} \div \frac{10}{19}$

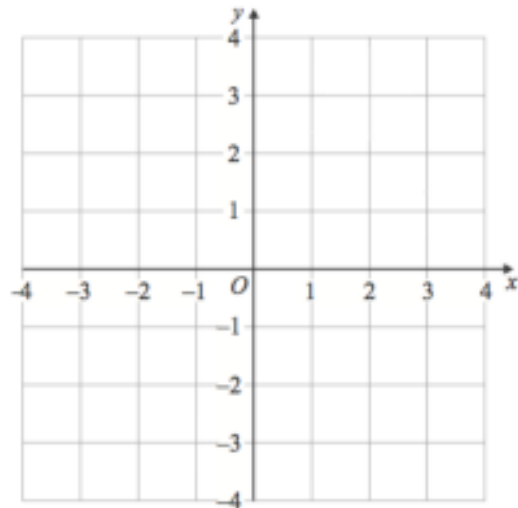
Sparx – Homework Answers



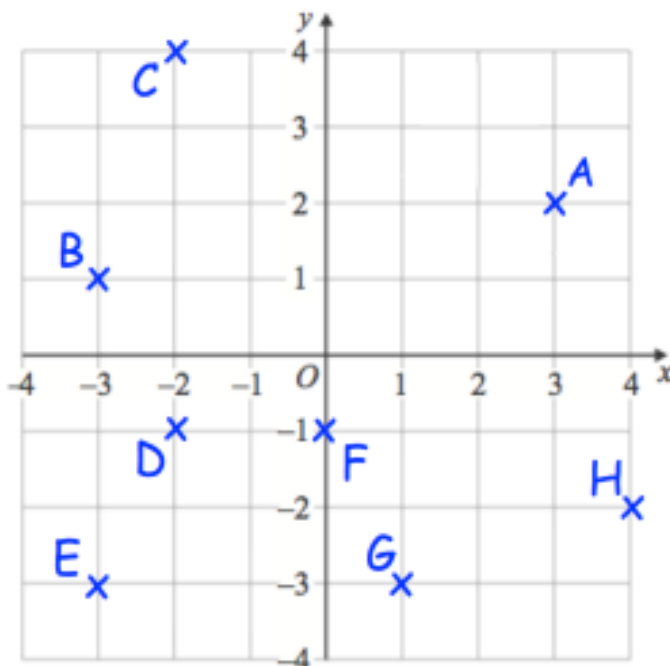
Week 3

Plot the following points on the axis and label.

- (a) A (1, 4)
- (b) B (-1, 1)
- (c) C (-3, -4)
- (d) D (2, -1)
- (e) E (-2, 0)
- (f) F (-1, -2)
- (g) G (3, -2)
- (h) H (0, -4)
- (i) I (-2, 2)
- (j) J (-4, -1)
- (k) K (0, 1)



Write down the coordinates of the points A, B, C, D, E, F, G and H.



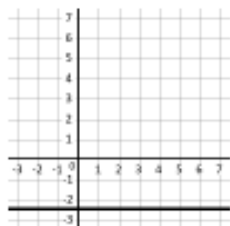
- A)
- B)
- C)
- D)
- E)
- F)
- G)
- H)

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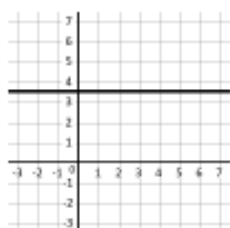


Week 4

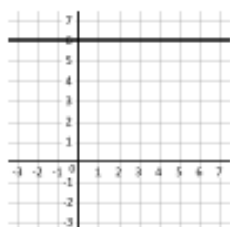
1 Write down the equation of the line



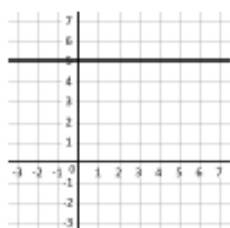
2 Write down the equation of the line



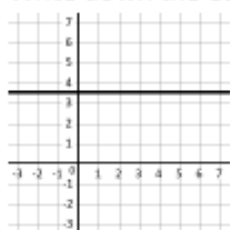
3 Write down the equation of the line



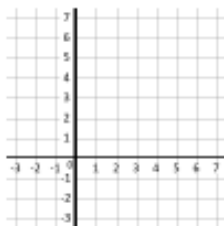
4 Write down the equation of the line



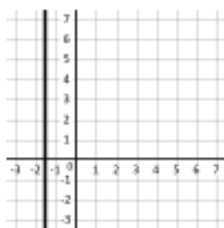
5 Write down the equation of the line



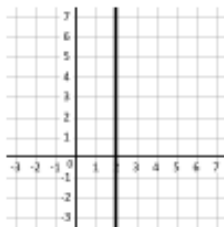
6 Write down the equation of the line



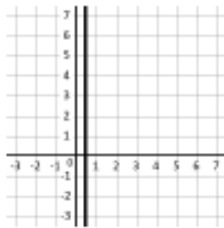
7 Write down the equation of the line



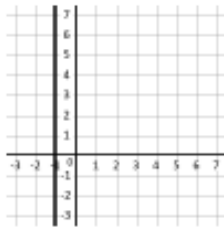
8 Write down the equation of the line



9 Write down the equation of the line



10 Write down the equation of the line



Sparx – Homework Answers

Week 5

For each equation, complete the table of values and draw its graph for values of x from -2 to 2 .

(a) $y = 3x + 3$

x	-2	-1	0	1	2
y					

(b) $y = x + 9$

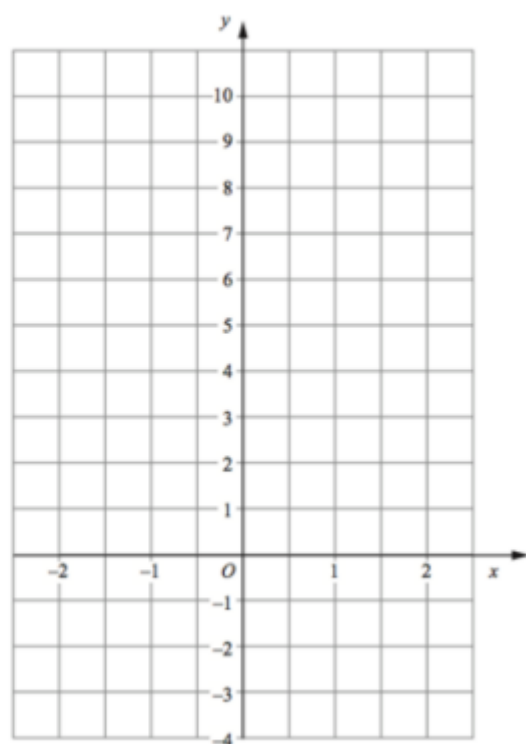
x	-2	-1	0	1	2
y					

(c) $y = x - 2$

x	-2	-1	0	1	2
y					

(d) $y = x$

x	-2	-1	0	1	2
y					



For each equation, complete the table of values and draw its graph for values of x from -1 to 3 .

(a) $y = -2x + 5$

x	-1	0	1	2	3
y					

(b) $y = -x - 2$

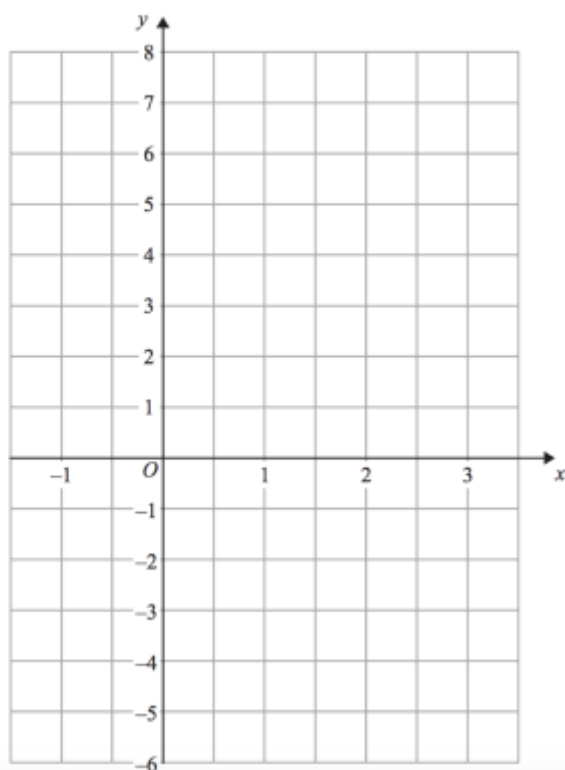
x	-1	0	1	2	3
y					

(c) $y = -2x$

x	-1	0	1	2	3
y					

(d) $y = 6 - x$

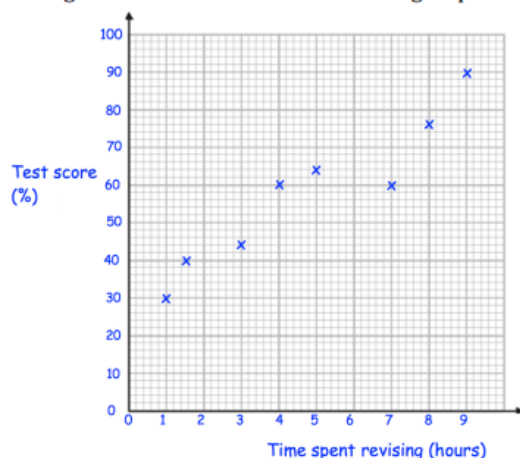
x	-1	0	1	2	3
y					



Sparx – Homework Answers

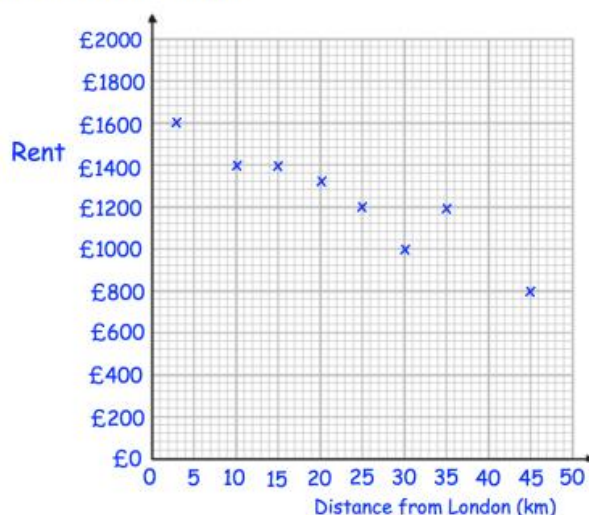
Week 6

Question 1: The scatter graph below shows information about the number of hours spent revising for a test and the test result for a group of 8 students.



- (a) Daisy spent 7 hours revising for the test. What is Daisy's test score?
- (b) Harry's test score was 30%. How many hours did Harry spend revising?
- (c) Draw a line of best fit.
- (d) Another student spent 6 hours revising for the test. Find an estimate of their test score.
- (e) Explain why it might not be sensible to use the scatter graph to estimate the score for a student that spent 15 hours revising.

Question 2: The scatter graph shows information about the cost of renting apartments and their distance from London.



- (a) Describe the relationship shown in the scatter graph.
- (b) Draw a line of best fit on the diagram.
- (c) Estimate the cost of renting an apartment 40km from London.
- (d) Victor has £1100 to spend on rent. Estimate how close he could live to London.
- (e) Explain why it might not be sensible to use the scatter graph to estimate the price of rent for a property that is 250km from London.

Sparx – Homework Answers