

Name	
Form	
Teacher	

Maths

Homework Booklet

Year 8

Autumn

Topic	Hand in date	Score achieved
1: Number Skills		
2: Number Skills		
3: Solving Equations		
4: Simplifying		
5: Adding and Subtracting (Column)		
6: Multiplication and Division		
7: Directed Numbers and BIDMAS		



Year 7 Half Term 1: Homework Booklet

Week 1: Number Skills (No calculator)

1. 9×9	2. $437 + 454$	3. 2×10	4. $770 - 532$	5. $414 + 283$	6. $427 + 132$	7. $30 \div 5$	8. 2×11
9. $882 - 513$	10. 10×8	11. 11×11	12. 5×10	13. 12×12	14. $80 \div 8$	15. $880 - 498$	16. 6×7
17. $149 + 496$	18. $355 + 411$	19. $996 - 73$	20. $998 - 227$	21. $852 - 161$	22. $18 \div 9$	23. 6×4	24. 4×10
25. $66 \div 11$	26. $8 \div 4$	27. $362 + 226$	28. $32 \div 4$	29. 2×7	30. $940 - 535$	31. 6×4	32. $14 \div 2$
33. $99 + 204$	34. $412 + 170$	35. $847 - 124$	36. 10×5	37. $80 \div 8$	38. $890 - 528$	39. 2×7	40. $783 - 398$



Year 8 Half Term 1: Homework Booklet

Number Skills (Working Out)

You must show working here



Year 8 Half Term 1: Homework Booklet

Week 2: Number Skills

1. 6×2	2. $456 + 283$	3. $30 \div 10$	4. $231 + 340$	5. $25 \div 5$	6. $370 + 279$	7. $16 \div 4$	8. $759 - 504$
9. $190 + 114$	10. $894 - 263$	11. $101 + 270$	12. $973 - 364$	13. $104 + 444$	14. $249 + 272$	15. $278 + 335$	16. 8×6
17. $72 \div 9$	18. 8×6	19. $40 \div 10$	20. $814 - 686$	21. $32 \div 8$	22. $194 + 427$	23. $345 + 119$	24. $56 \div 7$
25. $208 + 321$	26. 2×7	27. $30 \div 10$	28. $750 - 153$	29. $40 \div 4$	30. $979 - 605$	31. 2×10	32. $799 - 578$
33. $42 \div 7$	34. 10×3	35. $42 \div 6$	36. 10×3	37. 3×6	38. 10×5	39. $59 + 76$	40. $12 \div 3$



Year 8 Half Term 1: Homework Booklet

Number Skills (Working Out)

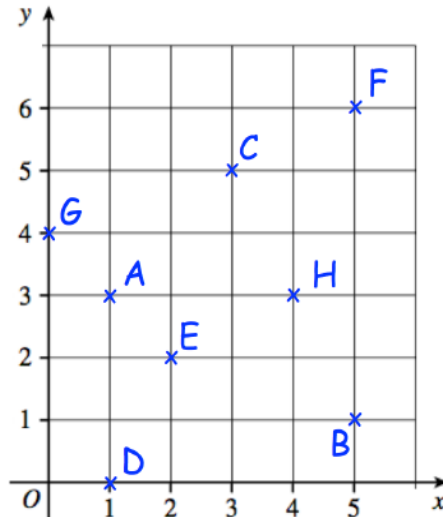
You must show working here



Year 7 Half Term 1: Homework Booklet

Week 3: Coordinates

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



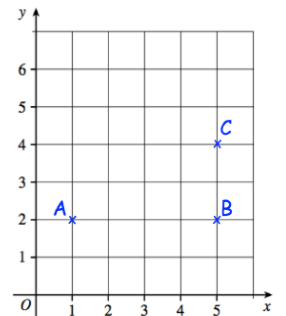
Section A

- (a) (b) (c) (d)
- (e) (f) (g) (h)

Section B

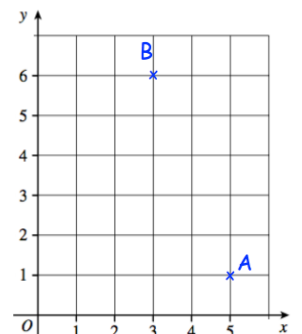
Question 1: Three points are shown on a grid.
ABCD is a rectangle.

- (a) Plot D
(b) Write down the coordinates of the point D



Question 2: Two points are shown on a grid
ABC is an isosceles triangle.

- (a) Plot C
(b) Write down the coordinates of the point C





Year 7 Half Term 1: Homework Booklet

Week 3: Coordinates (Continued..)

Section C

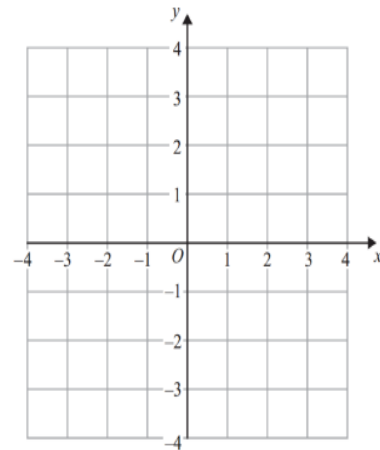
Question 1: Draw the following graphs

(a) $x = 1$

(b) $x = 4$

(c) $x = -2$

(d) $x = 1.5$



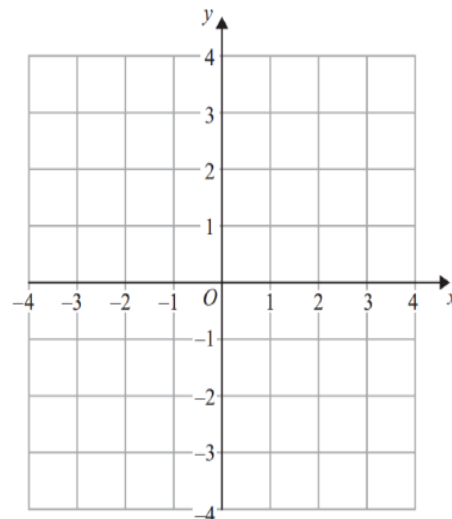
Question 3: Draw the following graphs

(a) $y = 2$

(b) $y = -1$

(c) $y = -4$

(d) $y = 0.5$





Year 7 Half Term 1: Homework Booklet

Week 4: Direct Proportional Graphs

Section A

1 On the line $y = x$, the y -coordinate is equal to the x -coordinate.

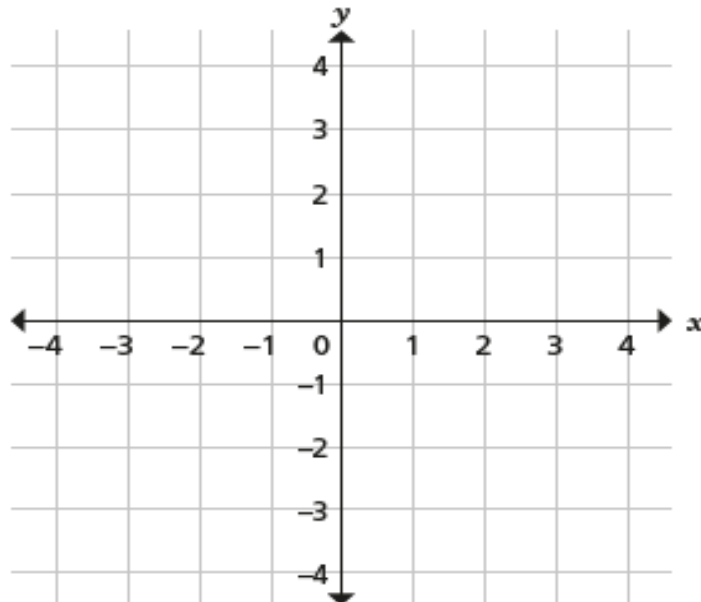
a) Complete the table of values for $y = x$.

x	-1	0		2	
y		0	1		3

b) Write the values in the table as coordinates.

$(-1, \square)$, $(0, 0)$, $(\square, 1)$, $(2, \square)$, $(\square, 3)$

c) Plot the points.

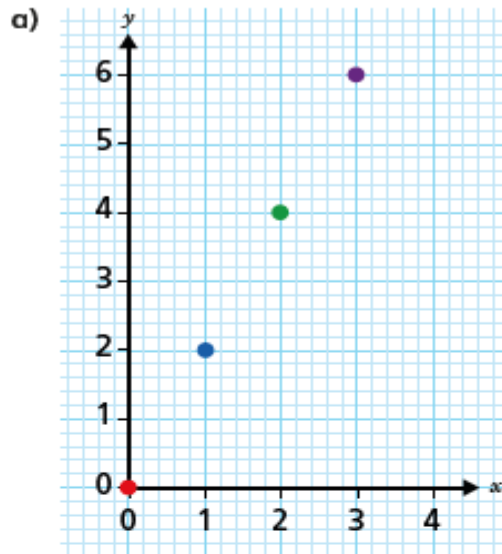


d) Join the points to make the line $y = x$.

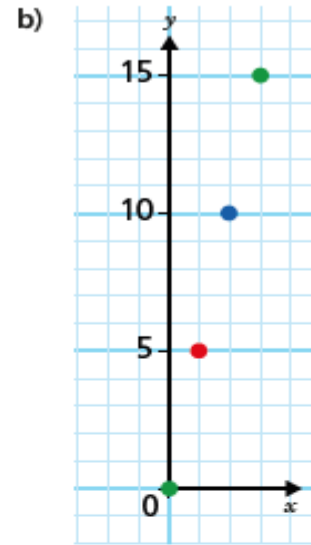
e) Is the point $(3, 4)$ above or below the line $y = x$? _____

Section B

1 Which times-tables do the graphs show?



times-table



times-table

2 a) Complete the table of values for $y = 4x$.

x	-2	-1	0		2	
y	-8			4		12

b) Write the values in the table as coordinates.

$(-2, -8), (\square, \square), (\square, \square), (\square, \square),$
 $(\square, \square), (\square, \square)$

3 a) Complete the table of values for $y = 3x$.

Use values of x from -2 to 2

x					
y					

b) Write the values in the table as coordinates.

$(\square, \square), (\square, \square), (\square, \square),$
 $(\square, \square), (\square, \square)$

Section C

1

The cost of 4 bananas is 60p.



a) Find the cost of:

1 banana

7 bananas

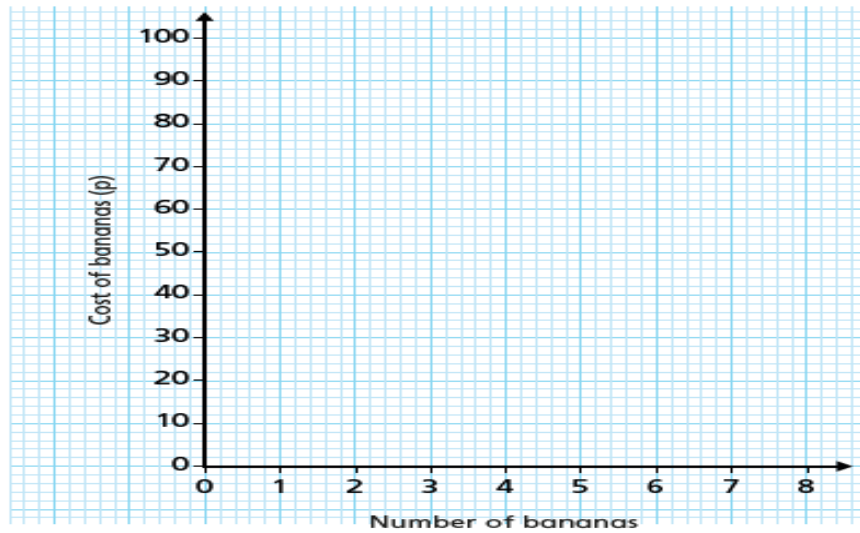
5 bananas

x bananas _____

b) Complete the table showing the cost of bananas.

Number of bananas (x)	1	2	3	4	5	6
Cost of bananas (y)				60p		

c) Plot a graph to show the cost of bananas.

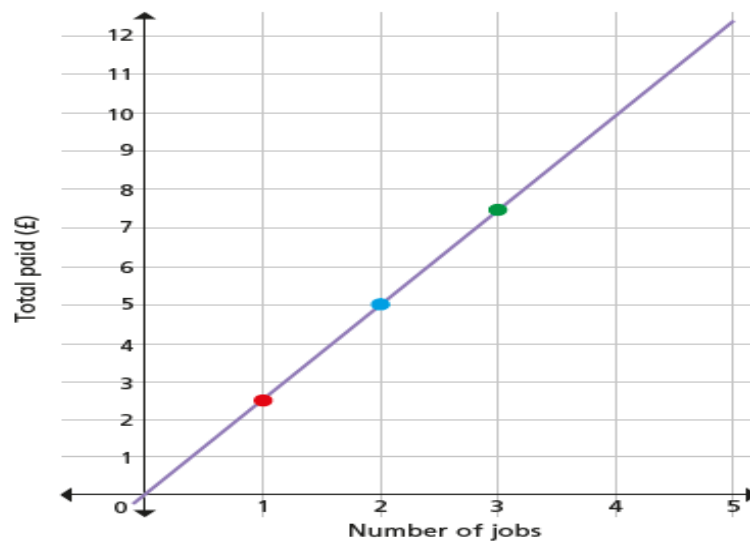


What is the equation of the line formed by the points?

2

Ron is paid for every job he completes.

He has made a graph to keep track of his jobs.



a) How much money does Ron make for each job? £

b) Tick the correct equation for Ron's graph.

$y = 2.50$

$y = x + 2.50$

$y = 250x$

$y = 2.5x$



Year 8 Half Term 1: Homework Booklet

Week 5: Improper Fractions and Mixed Numbers

Section A

Converting mixed numbers

Directions: Convert the mixed numbers to improper fractions.

$$2 \frac{2}{12} = \text{---}$$

$$3 \frac{2}{5} = \text{---}$$

$$2 \frac{1}{8} = \text{---}$$

$$1 \frac{1}{2} = \text{---}$$

$$3 \frac{4}{12} = \text{---}$$

$$2 \frac{3}{5} = \text{---}$$

Section B

Convert improper fractions to mixed numbers

Grade 4 Fractions Worksheet

Convert.

$$1. \frac{10}{3} = \text{---}$$

$$2. \frac{7}{2} = \text{---}$$

$$3. \frac{7}{5} = \text{---}$$

$$4. \frac{38}{10} = \text{---}$$

$$5. \frac{20}{12} = \text{---}$$

$$6. \frac{3}{2} = \text{---}$$

$$7. \frac{9}{5} = \text{---}$$

$$8. \frac{13}{4} = \text{---}$$

$$9. \frac{19}{5} = \text{---}$$



Year 8 Half Term 1: Homework Booklet

Week 5: Improper Fractions and Mixed Numbers

Section C

Question 1: Match up the improper fractions and mixed numbers.

$$2\frac{1}{4}$$

$$2\frac{1}{3}$$

$$1\frac{3}{4}$$

$$3\frac{2}{3}$$

$$\frac{7}{4}$$

$$\frac{11}{3}$$

$$\frac{7}{3}$$

$$\frac{9}{4}$$

Question 2: Arrange these improper fractions in order, starting with the smallest

$$\frac{23}{4}, \frac{37}{7}, \frac{11}{2}$$

Question 3: Write down a mixed number between $3\frac{3}{11}$ and $3\frac{2}{5}$

Question 4: Gregory feeds his cat $\frac{2}{5}$ of a can of cat food each day.

Work out how many cans of cat food are eaten each fortnight.

Give your answer as a mixed number.



Question 5:

$$13$$

$$9$$

$$21$$

$$5$$

$$2$$

Using the cards, create an improper fraction that is:

- (a) between 1 and 2
- (c) between 4 and 5
- (e) greater than 10

- (b) between 2 and 3
- (d) between 5 and 10



Year 8 Half Term 1: Homework Booklet

Week 6: Multiplying Fractions

Section A

$$1. \frac{1}{2} \times \frac{2}{7} = \text{---} = \text{---}$$

Result Simplify

$$2. \frac{1}{4} \times \frac{2}{5} = \text{---} = \text{---}$$

$$3. \frac{2}{3} \times \frac{1}{2} = \text{---} = \text{---}$$

$$4. \frac{1}{2} \times \frac{2}{3} = \text{---} = \text{---}$$

$$5. \frac{3}{7} \times \frac{1}{3} = \text{---} = \text{---}$$

$$6. \frac{4}{9} \times \frac{1}{2} = \text{---} = \text{---}$$

$$7. \frac{1}{2} \times \frac{2}{5} = \text{---} = \text{---}$$

$$8. \frac{1}{2} \times \frac{4}{5} = \text{---} = \text{---}$$

$$9. \frac{3}{5} \times \frac{5}{8} = \text{---} = \text{---}$$

$$10. \frac{3}{5} \times \frac{5}{7} = \text{---} = \text{---}$$

Section B

$$11. \frac{1}{4} \times \frac{2}{3} = \text{---} = \text{---}$$

$$12. \frac{1}{3} \times \frac{3}{8} = \text{---} = \text{---}$$

$$13. \frac{4}{5} \times \frac{1}{2} = \text{---} = \text{---}$$

$$14. \frac{5}{9} \times \frac{4}{5} = \text{---} = \text{---}$$

$$15. \frac{3}{4} \times \frac{1}{3} = \text{---} = \text{---}$$

$$16. \frac{2}{5} \times \frac{5}{8} = \text{---} = \text{---}$$

$$17. \frac{8}{9} \times \frac{7}{8} = \text{---} = \text{---}$$

$$18. \frac{2}{5} \times \frac{1}{8} = \text{---} = \text{---}$$

$$19. \frac{5}{6} \times \frac{4}{9} = \text{---} = \text{---}$$

$$20. \frac{4}{7} \times \frac{3}{4} = \text{---} = \text{---}$$



Year 7 Half Term 1: Homework Booklet

Week 6: Multiplying Fractions (Continued..)

Section C: Simplify where possible

Example $\frac{3}{7} \times 8 = \frac{3 \times 8}{7} = \frac{24}{7} = 3 \frac{3}{7}$



1) $\frac{1}{2} \times 5 =$

2) $\frac{1}{5} \times 4 =$

3) $9 \times \frac{2}{5} =$

4) $\frac{3}{4}$ of 6 =

5) $\frac{2}{9} \times 5 =$

6) $\frac{4}{5} \times 4 =$

7) $5 \times \frac{3}{8} =$

8) $8 \times \frac{2}{3} =$

9) $6 \times \frac{2}{7} =$

10) $\frac{5}{8}$ of 4 =

11) $\frac{3}{10} \times 7 =$

12) $3 \times \frac{7}{9} =$

13) $9 \times \frac{5}{11} =$

14) $7 \times \frac{4}{7} =$

15) $\frac{3}{8} \times 5 =$

16) $\frac{9}{10} \times 11 =$

17) $\frac{2}{11}$ of 20 =

18) $8 \times \frac{5}{12} =$

19) $9 \times \frac{7}{20} =$

20) $\frac{3}{7} \times 12 =$

21) $7 \times \frac{8}{9} =$



Year 7 Half Term 1: Homework Booklet

Week 7: Dividing Fractions

Section A:

$$1) \frac{2}{3} \div \frac{1}{5} = \underline{\hspace{2cm}}$$

$$2) \frac{3}{2} \div \frac{4}{9} = \underline{\hspace{2cm}}$$

$$3) \frac{5}{8} \div \frac{3}{7} = \underline{\hspace{2cm}}$$

$$4) \frac{3}{5} \div \frac{9}{4} = \underline{\hspace{2cm}}$$

$$5) \frac{4}{9} \div \frac{2}{9} = \underline{\hspace{2cm}}$$

$$6) \frac{6}{5} \div \frac{9}{5} = \underline{\hspace{2cm}}$$

$$7) \frac{3}{8} \div \frac{2}{7} = \underline{\hspace{2cm}}$$

$$8) \frac{2}{7} \div \frac{5}{3} = \underline{\hspace{2cm}}$$

$$9) \frac{1}{6} \div \frac{4}{8} = \underline{\hspace{2cm}}$$

$$10) \frac{5}{7} \div \frac{8}{3} = \underline{\hspace{2cm}}$$

$$11) \frac{7}{9} \div \frac{8}{5} = \underline{\hspace{2cm}}$$

$$12) \frac{3}{6} \div \frac{6}{9} = \underline{\hspace{2cm}}$$

Section B:

$$1 + \frac{3}{9} =$$

$$\frac{11}{12} + 3 =$$

$$2 + \frac{2}{6} =$$

$$\frac{1}{3} + 2 =$$

$$9 + \frac{1}{6} =$$

$$\frac{2}{5} + 7 =$$

$$6 + \frac{6}{10} =$$

$$\frac{1}{2} + 4 =$$

$$5 + \frac{2}{4} =$$

$$\frac{2}{10} + 5 =$$

$$5 + \frac{1}{8} =$$

$$\frac{3}{6} + 7 =$$

$$2 + \frac{10}{12} =$$

$$\frac{1}{5} + 7 =$$