





www.mathsrevision.com Level E Homework 3 Prime Numbers and Fractions & Percentage Show your working

- Q1. Is 37 a prime number. Explain your answer?
- Q2. What is the highest common factor of the numbers 6 and 8?
- Q3. What is the lowest common multiple of the numbers 6 and 8?
- Q4. Convert the following fractions to percentages.
  - (a)  $\frac{3}{10}$  (b)  $\frac{3}{5}$  (c)  $\frac{1}{8}$

(ii) Convert the following percentages to fractions and simplify were possible?

(a) 75% (b) 40% (c) 3.5%

Q5. Find.

(a) 
$$\frac{3}{5}$$
 of £60 (b) 32% of £300

- Q6. (a) Ian scored 24 out of 30 in a Maths test and 50 out of 60 for his History test. What was his percentage score in each exam?
  - (b) Which subject is he best at.

Z			www.m Leve Statistics and	naths I E H <sup>Algebra</sup> Show you	revisio Omewo 1 and Negar ur working	n.com ork 4 <sup>tive Numbers</sup>		
Q1.	Find	the mean a	nd range of	the set	of numb	ers below		
			2	5, 20, 8	50, 70, 35	5		
Q2.	Calc	ulate						
	(a)	3-9	(b) –1	9+11	(c)	-6-17	(d)	-12+(-14)
<b>Q</b> 3.	Сору	out the coo	rdinate diag	gram a	nd plot tl	ne points	v	
	A(4,-2	2) B(-3	3,2) C(	-2,-1)			4 3	
	(ii)	Join the p what shap	oints togeth e do you get	er, t.		-4 -	2 1 3 -2 -1 0 -1	1 2 3 4 ×
Q4.	Tidy	up the expr	essions				-2	
	(a) (b)	$2x + 6y + 3$ $a + b + a^2 + 3$	x + 7y $3b + 5a + b^2$				-4	
Q5.	For	a=5  y=3	t = 2 find					
	(a)	3 <i>at</i> – y	(b)	$\frac{1}{2}a$	ayt – at			
Q6.	(a)	Find an ex	pression for	r the to	otal T cos	t of the fru	its below	
	(b)	If an apple of	costs 26p and	a banan	na costs 32	p what is the	e total cost	Т.



www.mathsrevision.com Level E Homework 5 Statistics and Algebra 1 and Negative Numbers Show your working

- Q1. Solve the following equations:
  - (a) x+58=67 (b) 7x=84 (c) 4x-40=8
  - (d) 3x 11 = 13
- Q2. By picking from the following values {-2,-1,0,1,2} solve the following inequalities:
  - (a) x > -2 (b)  $x \ge -1$  (c)  $x \le 0$  (d) x < -2
- Q3. Solve the inequalities
  - (a) x-3 > 26 (b) 2x > 38 (c) 2x+5 > 23
- Q4. Find the perimeter and area for the following shapes.





www.mathsrevision.com Level E Homework 6 The Circle and Symmetry Show your working

- 1. Name the given parts of the circle.
- 2. Write down the diameter of a circle if the radius is 7cm.



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- 3. Write down the radius of a circle if the diameter is 6cm.
- 4. Complete the formula  $C = \_x D$
- 5. If the diameter of a circle is 10cm.Calculate the circumference.
- 6. Copy and complete the shape so that it has half-turn symmetry about it's centre.



7. What is the order of symmetry for the following shapes?





2. Copy out each composite shape and find its area. (Show your working)



3. Copy out the L – shape plan of the lawn below. (Show your working) Find the perimeter and total area of the lawn.





www.mathsrevision.com Level E Homework 8 Patterns Show your working

- 1. Find the next 3 numbers in each of the sequences.
  - (a) 6, 9, 12, ..., ..., ... (b) 4, 8, 16, ..., ..., ...
  - (c) 77, 66, 57,  $\dots$ ,  $\dots$  (d) 2, 3, 5, 7, 11,  $\dots$ ,  $\dots$
- 2. Write down all the square numbers between 50 and 200.
- 3. Fill in the table and determine a formula connecting the two letters (T) and (L).

No of Tables (T)	1	2	3	4	5	6
No of Legs (L)	4	8	12	16	20	24

4. Determine a formula connecting the two letters (F) and (L).

Fish (T)	1	2	3	4
Litres (L)	26	51	76	101







## www.mathsrevision.com Level E Homework 9 Quadrilaterals & Ratios Show your working

- 1. I have 2 pairs of parallel lines, 2 pairs of lengths that are equal, 4 right angles and 2 lines of symmetry. What is my shape?
- 2. Copy out the shapes and fill in as many angles.



3. Simplify the following ratios

(a) 4:20 (b) 3:27 (c) 7:84 (d) 12:108

4. The ratio of diesel to petrol are is 4:7

(a) How many petrol cars are there if there are: -

- (i) 8 diesels (ii) 20 diesels
- (b) How many diesel cars are there if there are: -
- (i) 18 petrol (ii) 84 petrol



1. The rectangle is drawn to the following scale 1 cm = 20 cm.



- (a) Find the real life length and breadth.
- (b) What is the real life perimeter and area?
- 2. Find the volume of the following shapes.



3. Find the volume of this composite shape.





## www.mathsrevision.com Level E Homework 11 Mixed Questions

Show your working

1. Calculate

(a) 12-23 (b) (-3)+26 (c) (-11)-45

- 2. Solve the equations
  - (a) 6x + 5 = 23 (b) 8x = 120
- 3. Find

60% of  $\pounds 540$ 

4. Find

(a) The length of the rectangle below.

$$X \text{ cm}$$
  
Area = 45 cm<sup>2</sup> 3 cm

(b) The perimeter.

5. Find a formula connecting table (T) and chairs (C).

No. of Tables (T)	1	2	3	4
No. of Chairs (L)	4	7	10	13

