mathsquad	Year 7 Topic 1 Sample Homework Sheet	Name: Due date:

Step 1: Times tables are all interconnected. Use previous answers to help with questions as needed

1. $10 \times 4 =$ 40
2. $1 \times 4 =$ 4
3. $2 \times 4 =$ 8
4. $0 \times 4 =$ 0

5. $10 \times 7 =$ 70
6. $11 \times 7 =$ 77
7. $9 \times 7 =$ 63
8. $5 \times 7 =$ 35

9. $2 \times 9 =$ 18
10. $4 \times 9 =$ 36
11. $8 \times 9 =$ 72
12. $7 \times 9 =$ 63

13. $2 \times 8 =$ 16
14. $3 \times 8 =$ 24
15. $6 \times 8 =$ 48
16. $7 \times 8 =$ 56

17. $2 \times 9 =$ 18
18. $10 \times 9 =$ 90
19. $12 \times 9 =$ 108
20. $8 \times 9 =$ 72

21. $6 \times 12 =$ 72
22. $8 \times 4 =$ 32
23. $7 \times 11 =$ 77
24. $9 \times 9 =$ 81

Step 2: The following Primary School maths skills involving the four basic operations underpin success in high school
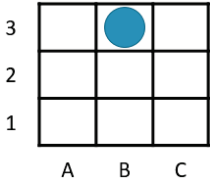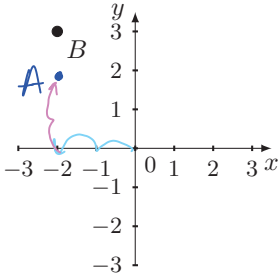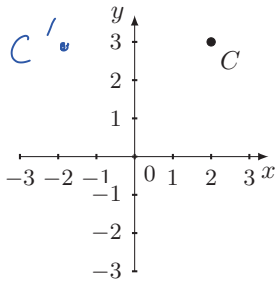
1.
   a. $3 + 7 =$ 10
   b. $4 + 8 =$ 12
   c. $5 + 57 =$ 62

2.
   a. $4 - 0 =$ 4
   b. $17 - 8 =$ 9
   c. $64 - 41 =$ 23

3.
   a. $4 \div 1 =$ 4
   b. $132 \div 12 =$ 11
   c. $54 \div 9 =$ 6

4.
   a. $63 \div 10 =$ 6 rem. 3
   b. $23 \div 6 =$ 3 rem. 5
   c. $4 \div 12 =$ 0 rem. 4

5. ✎ $432 + 2085$

$$\begin{array}{r} 2085 \\ +\ \ 432 \\ \hline 2517 \end{array}$$

6. ✎ $946 - 372$

$$\begin{array}{r} 946 \\ -\ 372 \\ \hline 574 \end{array}$$

7. ✎ 9×395

$$\begin{array}{r} 395 \\ \times\ \ \ 9 \\ \hline 3555 \end{array}$$

8. ✎ $6144 \div 3$

$$3\overline{)6144} = 2048$$

Step 3: The Core Level Skills will be the main focus of Topic 1.
Complete what you can each week with your best effort and watch your skills grow over time

Entry Level Skills	**Core Level Skills**	**Advanced Level Skills**
1A. Calculate a. $8 + 1 =$ 9 b. $3 - 2 =$ 1	1B. Calculate a. $^-3 - 2 =$ -5 b. $^-1 + 2 =$ 1	1C. Calculate a. $^-2 + ^-5 =$ -7 $-2 - 5$ b. $6 - ^-6 =$ 12 $6 + 6$
2A. Calculate a. $5 \times 11 =$ 55 b. $30 \div 10 =$ 3	2B. ✎ Evaluate $6 + 15 \div 5$ $= 6 + 3$ $= 9$	2C. ✎ Evaluate $(2 + 7)^2$ $= 9^2$ $= 81$
3A. ✎ Substitute $x = 17$ into $x - 7$ and evaluate. $x - 7$ $= 17 - 7$ $= 10$	3B. ✎ Substitute $x = 21$ into $\frac{x}{7}$ and evaluate. $\frac{x}{7}$ $= \frac{21}{7}$ $= 3$	3C. ✎ Substitute $x = 4$ into $8x + 4$ and evaluate. $8 \times 4 + 4$ $= 32 + 4$ $= 36$

4A. ✎ Solve the equation below and include working that shows your use of an opposite operation.	4B. ✎ Solve the equation below and include working that shows your use of an opposite operation.	4C. ✎ Solve the following:
$x + 2 = 11$ $-2 \quad -2$ $x = 9$	$\frac{9x}{9} = \frac{45}{9}$ $x = 5$	$\frac{20}{4} = \frac{4(x-1)}{4}$ $5 = x - 1$ $+1 \quad +1$ $6 = x$

5A. ✎ State the grid reference of the circle below.	5B. Plot the point $A = (-2, 2)$ below and state the coordinates of point B.	5C. The point C is reflected in the y axis. Plot C', the image of C, and state its coordinates.
B3	$B = (-2, 3)$	$C' = (-2, 3)$

Step 4: Complete these worded questions of increasing difficulty. You may use a calculator at any time.

1. ✎ Kylie walked 4152 steps and Callum walked 2162. How many more steps did Kylie walk than Callum?	2. On Monday it was -7°C and on Tuesday it was -2°C. Which day was colder and by how much?	3. ✎ 7 apples cost $2.45. How much would 5 apples cost?
$4152 - 2162$ $= 1990$	Monday was colder, by 5°C $(-2 - {}^-7 = 5)$	7 apples → 2.45 ÷7 ( ) ÷7 1 apple → 0.35 ×5 ( ) ×5 5 apples → 1.75 Ans: $1.75

4. ✎ A ferris wheel turns at a constant speed. It takes 4 minutes to turn through a complete circle. What angle does the ferris wheel turn through in 150 seconds?	5. ✎ In the multiplication $PQR \times 3 = QQQ$ each of P, Q and R represents a different digit. What is the sum of P, Q and R?
(4 min) 240 sec → 360° ÷8 ( ) ÷8 30 sec → 45° ×5 ( ) ×5 150 sec → 225° Ans: 225°	If $PQR \times 3 = QQQ$ → $QQQ \div 3 = PQR$ $111 \div 3 = 37$ $222 \div 3 = 74$ $333 \div 3 = 111$ $444 \div 3 = 148$ ✓ all digits different. $1 + 4 + 8 = 13$ Ans: 13

mathsquad	Year 7 Topic 1 Homework Sheet 1	Name: Due date:

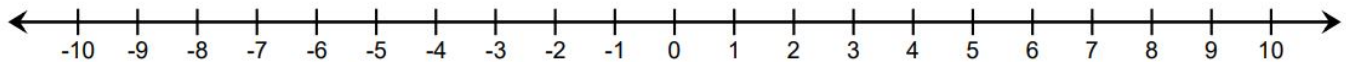**Step 1:** Times tables are all interconnected. Use previous answers to help with questions as needed

1. $0 \times 2 =$	5. $10 \times 7 =$	9. $2 \times 9 =$	13. $2 \times 3 =$	17. $2 \times 2 =$	21. $4 \times 5 =$
2. $1 \times 2 =$	6. $11 \times 7 =$	10. $4 \times 9 =$	14. $3 \times 3 =$	18. $10 \times 2 =$	22. $12 \times 7 =$
3. $10 \times 2 =$	7. $9 \times 7 =$	11. $8 \times 9 =$	15. $6 \times 3 =$	19. $12 \times 2 =$	23. $6 \times 9 =$
4. $2 \times 2 =$	8. $5 \times 7 =$	12. $7 \times 9 =$	16. $7 \times 3 =$	20. $8 \times 2 =$	24. $7 \times 7 =$

Step 2: The following Primary School maths skills involving the four basic operations underpin success in high school

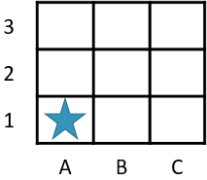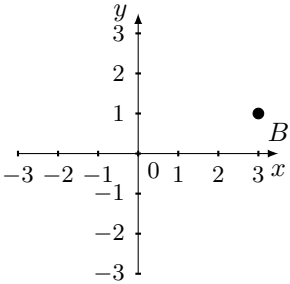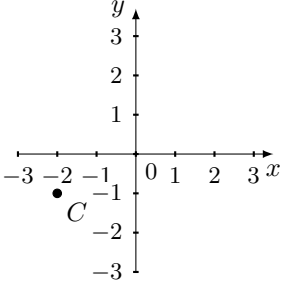| 1. a. $1 + 6 =$ b. $3 + 8 =$ c. $29 + 46 =$	2. a. $7 - 1 =$ b. $11 - 6 =$ c. $100 - 48 =$	3. a. $8 \div 2 =$ b. $40 \div 10 =$ c. $72 \div 8 =$	4. a. $13 \div 2 =$ rem. b. $23 \div 6 =$ rem. c. $51 \div 4 =$ rem.
5. ✎ $3194 + 473$	6. ✎ $515 - 354$	7. ✎ 116×8	8. ✎ $1296 \div 6$

Step 3: The Core Level Skills will be the main focus of Topic 1.
Complete what you can each week with your best effort and watch your skills grow over time

Entry Level Skills	**Core Level Skills**	**Advanced Level Skills**

1A. Calculate
  a. $3 + 1 =$
 	
  b. $7 - 2 =$
	1B. Calculate
	  a. $^-1 + 5 =$
	
	  b. $^-1 + 5 =$
		1C. Calculate
		  a. $2 - ^-2 =$
		
		  b. $2 - ^-3 =$

2A. Calculate
  a. $3 \times 11 =$
 	
  b. $49 \div 7 =$
	2B. ✎ Evaluate $5 + 36 \div 6$	2C. ✎ Evaluate $(6 + 3)^2$

3A. ✎ Substitute $x = 10$ into $x + 8$ and evaluate.	3B. ✎ Substitute $x = 56$ into $\frac{x}{7}$ and evaluate.	3C. ✎ Substitute $x = 4$ into $7(x - 3)$ and evaluate.

4A. ✎ Solve the following:	4B. ✎ Solve the following:	4C. ✎ Solve the following:
$x - 7 = 7$	$\frac{x}{8} = 5$	$\frac{x-3}{7} = 6$

5A. ✎ State the grid reference of the star below.	5B. Plot the point $A = (-2, 1)$ below and state the coordinates of point B.	5C. The point C is translated 1 unit to the left. Plot C', the image of C, and state its coordinates.
(grid with star at A1)	(coordinate plane with point B near $(3,1)$) $B = (\ ,\ )$	(coordinate plane with point C near $(-2,-1)$) $C' =$

Step 4: Complete these worded questions of increasing difficulty. You may use a calculator at any time.

1. ✎ The students of Green Acres School raised $5,000 for new books for the school library. So far the librarian has purchased $3,538 in new books. How much money does the school have left to purchase books?	2. ✎ The height of a river is shown on a marker, with the level at which it floods marked as zero. Due to heavy rain the river changed from -3.9m to 2.1m. By how many metres had the river level changed?	3. ✎ Up&Gos cost $4.50 per litre. At this rate, how much would a six pack of 250mL Up&Gos costs?

4. ✎ Helen paid $4465 for some cows. She paid the same amount for each cow. The cost of each cow was a whole number of dollars. Which of the following could be the number of cow Helen bought

A. 43

B. 45

C. 47

D. 49

5. ✎ At a party 28 handshakes were exchanged. Each person shook hands exactly once with each of the others. How many people were at the party?

| **mathsquad** | Year 7 Topic 1 | Name: |
| | Homework Sheet 2 | Due date: |

Step 1: Times tables are all interconnected. Use previous answers to help with questions as needed

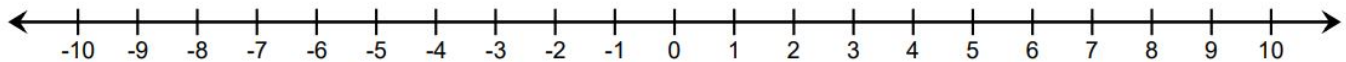|					
1. $0 \times 1 =$	5. $10 \times 3 =$	9. $2 \times 1 =$	13. $2 \times 9 =$	17. $2 \times 1 =$	21. $12 \times 11 =$
2. $1 \times 1 =$	6. $11 \times 3 =$	10. $4 \times 1 =$	14. $3 \times 9 =$	18. $10 \times 1 =$	22. $7 \times 9 =$
3. $10 \times 1 =$	7. $9 \times 3 =$	11. $8 \times 1 =$	15. $6 \times 9 =$	19. $12 \times 1 =$	23. $8 \times 8 =$
4. $2 \times 1 =$	8. $5 \times 3 =$	12. $7 \times 1 =$	16. $7 \times 9 =$	20. $8 \times 1 =$	24. $12 \times 12 =$

Step 2: The following Primary School maths skills involving the four basic operations underpin success in high school

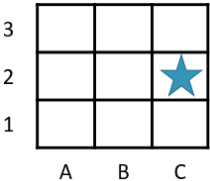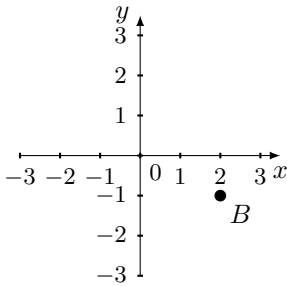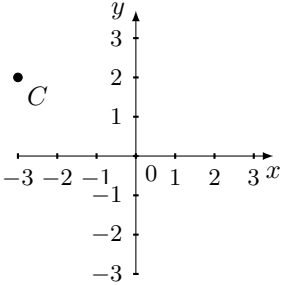|			
1. a. $2 + 2 =$ b. $6 + 8 =$ c. $80 + 12 =$	2. a. $7 - 4 =$ b. $13 - 4 =$ c. $46 - 36 =$	3. a. $2 \div 1 =$ b. $16 \div 4 =$ c. $36 \div 12 =$	4. a. $56 \div 10 =$ rem. b. $50 \div 9 =$ rem. c. $61 \div 7 =$ rem.
5. ✎ $462 + 2058$	6. ✎ $973 - 391$	7. ✎ 6×491	8. ✎ $8316 \div 4$

Step 3: The Core Level Skills will be the main focus of Topic 1.
Complete what you can each week with your best effort and watch your skills grow over time

Entry Level Skills	**Core Level Skills**	**Advanced Level Skills**

1A. Calculate
   a. $1 + 2 =$
 	
   b. $9 - 8 =$
	1B. Calculate
	   a. $^-1 - 2 =$
	
	   b. $^-5 - 2 =$
		1C. Calculate
		   a. $6 - {}^-1 =$
		
		   b. $^-1 + {}^-1 =$

2A. Calculate
   a. $1 \times 8 =$
 	
   b. $132 \div 12 =$
	2B. ✎ Evaluate $18 \div (9 - 6)$	2C. ✎ Evaluate $(5 - 1)^2$

3A. ✎ Substitute $x = 10$ into $x - 3$ and evaluate.	3B. ✎ Substitute $x = 30$ into $\frac{x}{10}$ and evaluate.	3C. ✎ Substitute $x = 42$ into $\frac{x}{7} + 5$ and evaluate.

4A. ✎ Solve the following:	4B. ✎ Solve the following:	4C. ✎ Solve the following:
$x - 9 = 9$	$2x = 4$	$2x + 6 = 10$

5A. ✎ State the grid reference of the star below.	5B. Plot the point $A = (-2, 3)$ below and state the coordinates of point B.	5C. The point C is reflected in the x axis. Plot C', the image of C, and state its coordinates.
	$B = (\ ,\ )$	$C' =$

Step 4: Complete these worded questions of increasing difficulty. You may use a calculator at any time.

1. ✎ A swimmer in training swam 4200 metres on Monday, 7685 metres on Tuesday and 3467 metres on Thursday. What was the total distance he swam in the three days?	2. ✎ An item costs $16.70 and Leyla pays with a $20 note. How much change will Leyla receive?	3. ✎ A 750g jar of Nutella costs $6.50. To the nearest cent, what is the price per 100g?

4. ✎ The petrol tank in Winnie's car is empty. She buys $72 worth of petrol at $1.50 per litre. Her car uses 8 litres per 100km travelled. How many kilometres until Winnie's tank is empty again?	5. ✎ The first of January 1981 fell on a Thursday. What day was the first of January in 1901?

mathsquad	Year 7 Topic 1 Homework Sheet 3	Name: Due date:

Step 1: Times tables are all interconnected. Use previous answers to help with questions as needed

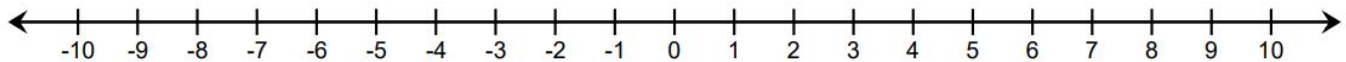|					
1. $10 \times 12 =$	5. $10 \times 4 =$	9. $2 \times 1 =$	13. $2 \times 12 =$	17. $2 \times 4 =$	21. $12 \times 10 =$
2. $1 \times 12 =$	6. $11 \times 4 =$	10. $4 \times 1 =$	14. $3 \times 12 =$	18. $10 \times 4 =$	22. $12 \times 7 =$
3. $2 \times 12 =$	7. $9 \times 4 =$	11. $8 \times 1 =$	15. $6 \times 12 =$	19. $12 \times 4 =$	23. $4 \times 7 =$
4. $0 \times 12 =$	8. $5 \times 4 =$	12. $7 \times 1 =$	16. $7 \times 12 =$	20. $8 \times 4 =$	24. $3 \times 3 =$

Step 2: The following Primary School maths skills involving the four basic operations underpin success in high school
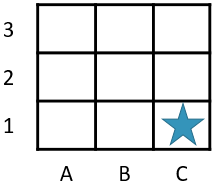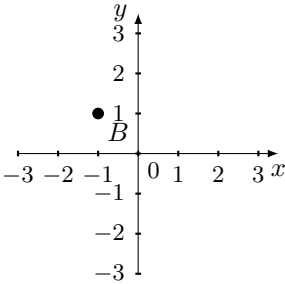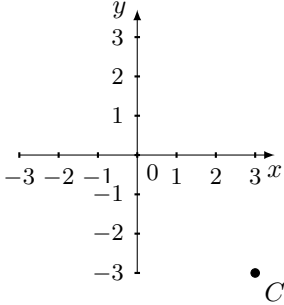
|			
1. a. $8 + 2 =$ b. $6 + 6 =$ c. $61 + 19 =$	2. a. $5 - 5 =$ b. $14 - 9 =$ c. $91 - 66 =$	3. a. $8 \div 1 =$ b. $90 \div 9 =$ c. $64 \div 8 =$	4. a. $19 \div 5 =$ rem. b. $7 \div 2 =$ rem. c. $1 \div 9 =$ rem.
5. ✎ $587 + 2048$	6. ✎ $897 - 659$	7. ✎ 4×633	8. ✎ $4716 \div 6$

Step 3: The Core Level Skills will be the main focus of Topic 1.
Complete what you can each week with your best effort and watch your skills grow over time

Entry Level Skills	**Core Level Skills**	**Advanced Level Skills**
1A. Calculate a. $0 + 7 =$ b. $3 - 2 =$	1B. Calculate a. $5 - 7 =$ b. $3 - 4 =$	1C. Calculate a. $^-6 + {^-1} =$ b. $^-1 - {^-2} =$
2A. Calculate a. $3 \times 3 =$ b. $55 \div 11 =$	2B. ✎ Evaluate $8 - 6 \div 2$	2C. ✎ Evaluate $27 - 4!$
3A. ✎ Substitute $x = 5$ into $x + 8$ and evaluate.	3B. ✎ Substitute $x = 20$ into $\frac{x}{5}$ and evaluate.	3C. ✎ Substitute $x = 2$ into $2x - 2$ and evaluate.

4A. ✎ Solve the following:	4B. ✎ Solve the following:	4C. ✎ Solve the following:
$x + 7 = 13$	$4x = 28$	$\frac{x}{4} + 4 = 9$

5A. ✎ State the grid reference of the star below.	5B. Plot the point $A = (1, -1)$ below and state the coordinates of point B.	5C. The point C is reflected in the y axis. Plot C', the image of C, and state its coordinates.
	$B = (\quad, \quad)$	$C' =$

Step 4: Complete these worded questions of increasing difficulty. You may use a calculator at any time.

1. ✎ There are 84 people at a club meeting. The organiser wishes to form 7 equal groups. How many people will there be in each group?	2. ✎ Grapes at Coles are on special for $3.50 per kilo. How much does 2.5kg of grapes cost?	3. ✎ If half a cup of sugar is needed to make 8 pancakes, how many pancakes can you make with 5.5 cups of sugar?

4. ✎ Carlos has 3 times as many lime trees as lemon trees. Altogether he has 76 trees. How many lime trees does he have?

5. ✎ In how many ways can a careless post office worker place four letters into 4 envelopes so that no one gets the right letter?

8

mathsquad	Year 7 Topic 1 Homework Sheet 4	Name: Due date:

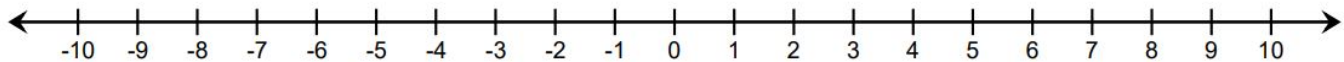**Step 1:** Times tables are all interconnected. Use previous answers to help with questions as needed

1. $0 \times 8 =$	5. $10 \times 10 =$	9. $2 \times 7 =$	13. $2 \times 1 =$	17. $2 \times 7 =$	21. $7 \times 8 =$
2. $1 \times 8 =$	6. $11 \times 10 =$	10. $4 \times 7 =$	14. $3 \times 1 =$	18. $10 \times 7 =$	22. $7 \times 7 =$
3. $10 \times 8 =$	7. $9 \times 10 =$	11. $8 \times 7 =$	15. $6 \times 1 =$	19. $12 \times 7 =$	23. $8 \times 7 =$
4. $2 \times 8 =$	8. $5 \times 10 =$	12. $7 \times 7 =$	16. $7 \times 1 =$	20. $8 \times 7 =$	24. $6 \times 6 =$

Step 2: The following Primary School maths skills involving the four basic operations underpin success in high school

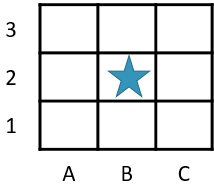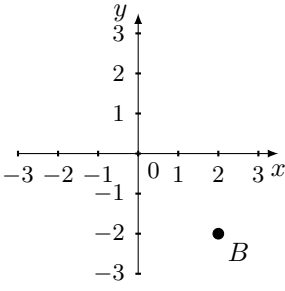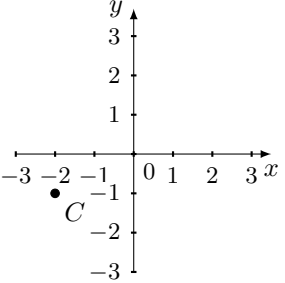|			
1. a. $3 + 3 =$ b. $8 + 7 =$ c. $88 + 8 =$	2. a. $10 - 4 =$ b. $13 - 4 =$ c. $55 - 14 =$	3. a. $12 \div 6 =$ b. $64 \div 8 =$ c. $27 \div 3 =$	4. a. $17 \div 5 =$ rem. b. $45 \div 11 =$ rem. c. $53 \div 7 =$ rem.
5. ✎ $2627 + 548$	6. ✎ $1126 - 742$	7. ✎ 9×446	8. ✎ $2452 \div 4$

Step 3: The Core Level Skills will be the main focus of Topic 1.
Complete what you can each week with your best effort and watch your skills grow over time

Entry Level Skills	**Core Level Skills**	**Advanced Level Skills**
1A. Calculate a. $7 + 1 =$ b. $5 - 4 =$	1B. Calculate a. $^-3 + 4 =$ b. $1 - 3 =$	1C. Calculate a. $4 - {}^-3 =$ b. $0 - {}^-3 =$
2A. Calculate a. $7 \times 4 =$ b. $64 \div 8 =$	2B. ✎ Evaluate $2 \times 3 + 3$	2C. ✎ Evaluate $10^2 - 126$
3A. ✎ Substitute $x = 15$ into $x - 9$ and evaluate.	3B. ✎ Substitute $x = 45$ into $\frac{x}{9}$ and evaluate.	3C. ✎ Substitute $x = 44$ into $\frac{x+5}{7}$ and evaluate.

4A. ✎ Solve the following:	4B. ✎ Solve the following:	4C. ✎ Solve the following:
$x + 8 = 17$	$\frac{x}{7} = 6$	$4x - 1 = 15$

5A. ✎ State the grid reference of the star below.	5B. Plot the point $A = (-3, 2)$ below and state the coordinates of point B.	5C. The point C is reflected in the x axis. Plot C', the image of C, and state its coordinates.
	$B = (\quad , \quad)$	$C' =$

Step 4: Complete these worded questions of increasing difficulty. You may use a calculator at any time.

1. ✎ 231 children from a school are to be transported on 7 buses. If the number of children on each bus is the same, how many children will there be on each bus?	2. ✎ Harry runs a handyman business and gets paid $32.50 per hour. How much will he earn from completing 4 hours work?	3. ✎ A brand of orange juice contains 194kJ of energy per 100mL. What is the volume of juice in the bottle if the total amount of energy in the bottle is 873kJ?

4. ✎ Once a year, Sam shaves his head for charity. He doesn't cut his hair for the rest of the year. This year the mass of hair he shaved off was 75g. On average, how many grams of hair did he grow per day? (Give answer to 3dps)	5. ✎ What is the least positive integer by which 504 should be multiplied so that the product is a perfect square?

mathsquad	Year 7 Topic 1 Homework Sheet 5	Name: Due date:

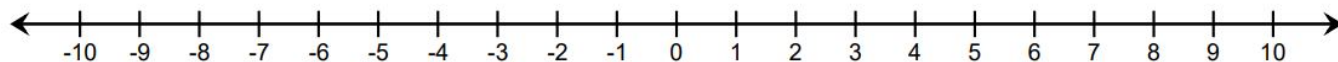**Step 1:** Times tables are all interconnected. Use previous answers to help with questions as needed

1. $10 \times 2 =$	5. $10 \times 8 =$	9. $2 \times 1 =$	13. $2 \times 11 =$	17. $2 \times 8 =$	21. $7 \times 12 =$
2. $1 \times 2 =$	6. $11 \times 8 =$	10. $4 \times 1 =$	14. $3 \times 11 =$	18. $10 \times 8 =$	22. $4 \times 6 =$
3. $2 \times 2 =$	7. $9 \times 8 =$	11. $8 \times 1 =$	15. $6 \times 11 =$	19. $12 \times 8 =$	23. $8 \times 12 =$
4. $0 \times 2 =$	8. $5 \times 8 =$	12. $7 \times 1 =$	16. $7 \times 11 =$	20. $8 \times 8 =$	24. $1 \times 1 =$

Step 2: The following Primary School maths skills involving the four basic operations underpin success in high school

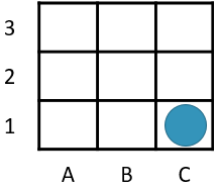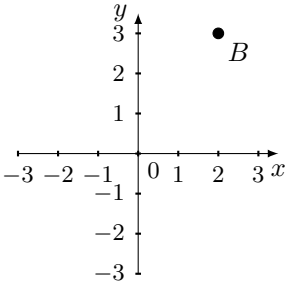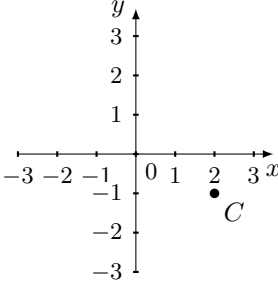|			
1. a. $1 + 2 =$ b. $7 + 4 =$ c. $29 + 69 =$	2. a. $10 - 6 =$ b. $18 - 9 =$ c. $56 - 24 =$	3. a. $120 \div 10 =$ b. $24 \div 12 =$ c. $18 \div 6 =$	4. a. $7 \div 2 =$ rem. b. $42 \div 9 =$ rem. c. $31 \div 5 =$ rem.
5. ✎ $779 + 3049$	6. ✎ $1524 - 729$	7. ✎ 271×5	8. ✎ $7688 \div 4$

Step 3: The Core Level Skills will be the main focus of Topic 1.
Complete what you can each week with your best effort and watch your skills grow over time

Entry Level Skills	**Core Level Skills**	**Advanced Level Skills**

1A. Calculate
  a. $3 + 5 =$
 	
  b. $10 - 9 =$
	1B. Calculate
	  a. $4 - 8 =$
	
	  b. $^-1 + 2 =$
		1C. Calculate
		  a. $3 + {}^-5 =$
		
		  b. $1 - {}^-3 =$

2A. Calculate
  a. $11 \times 12 =$
 	
  b. $9 \div 1 =$
	2B. ✎ Evaluate $4 \times (9 - 3)$	2C. ✎ Evaluate $(8 + 3)^2$

3A. ✎ Substitute $x = 6$ into $x + 3$ and evaluate.	3B. ✎ Substitute $x = 18$ into $\frac{x}{6}$ and evaluate.	3C. ✎ Substitute $x = 7$ into $8x + 9$ and evaluate.

4A. ✎ Solve the following:	4B. ✎ Solve the following:	4C. ✎ Solve the following:
$x - 8 = 3$	$\frac{x}{5} = 4$	$5x + 4 = 39$

5A. ✎ State the grid reference of the circle below.	5B. Plot the point $A = (-2, 3)$ below and state the coordinates of point B.	5C. The point C is translated 4 units to the left. Plot C', the image of C, and state its coordinates.
	$B = (\ ,\ )$	$C' =$

Step 4: Complete these worded questions of increasing difficulty. You may use a calculator at any time.

1. ✎ A group of 6 adults go bowling and the total cost is \$108. How much does it cost each adult to bowl?	2. ✎ Lucas took a bus from Melbourne to Sydney. His bus left at 8:15am and arrived at 7:50pm on the same day. How long did Lucas's bus trip take?	3. ✎ Last year 9516 people went to a music festival. The number of people who went to the festival this year was $\frac{3}{4}$ of last year's figure. How many people went to the festival this year? **A.** 2379 **B.** 7137 **C.** 7516 **D.** 11895

4. The lights in Jo's office are on for 40 hours per week, every week of the year. Jo replaces a light globe after 8000 hours. After how long, to the nearest year, will Jo need to replace a light globe?	5. ✎ The value of 50! is the product of all the whole numbers from 1 to 50 inclusive, that is $50! = 1 \times 2 \times 3 \times \ldots \times 49 \times 50$. What is the maximum number of times that 2 will divide into 50! exactly?

| **mathsquad** | Year 7 Topic 1 | Name: |
| | Homework Sheet 6 | Due date: |

Step 1: Times tables are all interconnected. Use previous answers to help with questions as needed
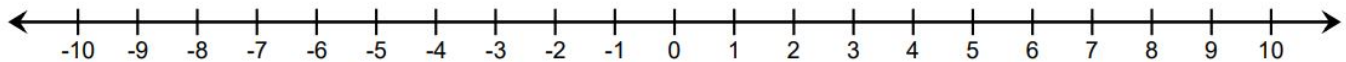
1. $10 \times 3 =$	5. $10 \times 1 =$	9. $2 \times 4 =$	13. $2 \times 10 =$	17. $2 \times 5 =$	21. $7 \times 5 =$
2. $1 \times 3 =$	6. $11 \times 1 =$	10. $4 \times 4 =$	14. $3 \times 10 =$	18. $10 \times 5 =$	22. $12 \times 11 =$
3. $2 \times 3 =$	7. $9 \times 1 =$	11. $8 \times 4 =$	15. $6 \times 10 =$	19. $12 \times 5 =$	23. $4 \times 3 =$
4. $0 \times 3 =$	8. $5 \times 1 =$	12. $7 \times 4 =$	16. $7 \times 10 =$	20. $8 \times 5 =$	24. $5 \times 5 =$

Step 2: The following Primary School maths skills involving the four basic operations underpin success in high school
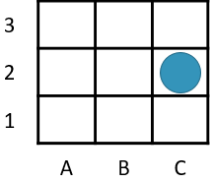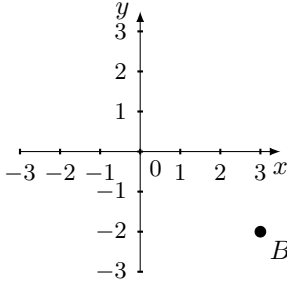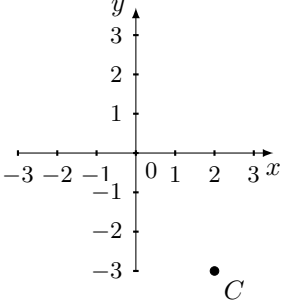
1. a. $1 + 6 =$ b. $7 + 6 =$ c. $7 + 40 =$	2. a. $8 - 5 =$ b. $11 - 6 =$ c. $87 - 31 =$	3. a. $3 \div 3 =$ b. $108 \div 12 =$ c. $45 \div 9 =$	4. a. $13 \div 2 =$ rem. b. $8 \div 6 =$ rem. c. $8 \div 9 =$ rem.
5. ✏️ $3467 + 848$	6. ✏️ $1174 - 277$	7. ✏️ 897×7	8. ✏️ $8396 \div 4$

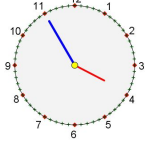**Step 3:** The Core Level Skills will be the main focus of Topic 1.
Complete what you can each week with your best effort and watch your skills grow over time

Entry Level Skills	**Core Level Skills**	**Advanced Level Skills**
1A. Calculate a. $6 + 2 =$ b. $3 - 2 =$	1B. Calculate a. $^-1 - 2 =$ b. $^-1 + 2 =$	1C. Calculate a. $^-4 + {}^-1 =$ b. $^-3 + {}^-6 =$
2A. Calculate a. $3 \times 2 =$ b. $90 \div 10 =$	2B. ✏️ Evaluate $33 \div (6 + 5)$	2C. ✏️ Evaluate 5×4^2
3A. ✏️ Substitute $x = 6$ into $x + 8$ and evaluate.	3B. ✏️ Substitute $x = 15$ into $\frac{x}{3}$ and evaluate.	3C. ✏️ Substitute $x = 25$ into $\frac{x}{5} + 9$ and evaluate.

13

4A. ✎ Solve the following:	4B. ✎ Solve the following:	4C. ✎ Solve the following:
$$x - 5 = 2$$	$$9x = 36$$	$$24 = 2(x+5)$$

5A. ✎ State the grid reference of the circle below.	5B. Plot the point $A = (1, -2)$ below and state the coordinates of point B.	5C. The point C is reflected in the y axis. Plot C', the image of C, and state its coordinates.
	$B = (\quad , \quad)$	$C' =$

Step 4: Complete these worded questions of increasing difficulty. You may use a calculator at any time.

1. ✎ Alyssa has 96 muffins, which she needs to box up into dozens. How many boxes does she need?	2. What time is shown on the clock? **A.** 3:55 **B.** 4:05 **C.** 4:55 **D.** 11:20	3. ✎ A local tool shop hires out nailguns at a base charge of $26 plus $4.50 per hour. For $62, how many hours can you hire the nailgun?

4. ✎ Tom takes 72 paces to walk across the school yard. His pace is 90cm long. Lara's pace is 80cm long. How many paces does Lara take to walk across the school yard?	5. ✎ Kirsten runs twice as fast as she walks. When going to school one day she walks for twice the time she runs and takes 20 minutes. The next day she runs for twice the times she walks. How many minutes does it take her to get to school on the second day?

mathsquad	Year 7 Topic 1 Homework Sheet 7	Name: Due date:

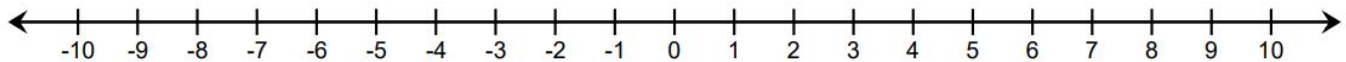**Step 1:** Times tables are all interconnected. Use previous answers to help with questions as needed

1. $10 \times 11 =$	5. $10 \times 5 =$	9. $2 \times 8 =$	13. $2 \times 12 =$	17. $2 \times 5 =$	21. $7 \times 8 =$
2. $1 \times 11 =$	6. $11 \times 5 =$	10. $4 \times 8 =$	14. $3 \times 12 =$	18. $10 \times 5 =$	22. $12 \times 7 =$
3. $2 \times 11 =$	7. $9 \times 5 =$	11. $8 \times 8 =$	15. $6 \times 12 =$	19. $12 \times 5 =$	23. $8 \times 7 =$
4. $0 \times 11 =$	8. $5 \times 5 =$	12. $7 \times 8 =$	16. $7 \times 12 =$	20. $8 \times 5 =$	24. $4 \times 4 =$

Step 2: The following Primary School maths skills involving the four basic operations underpin success in high school

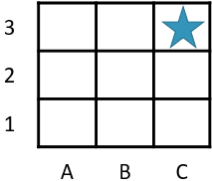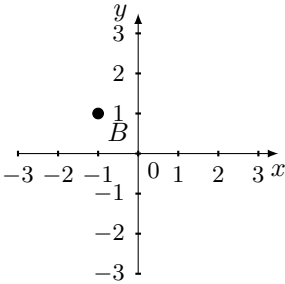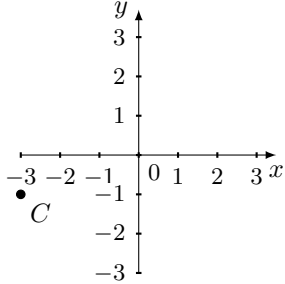| 1. a. $6 + 3 =$ b. $9 + 3 =$ c. $55 + 8 =$	2. a. $8 - 2 =$ b. $14 - 5 =$ c. $58 - 38 =$	3. a. $55 \div 11 =$ b. $16 \div 8 =$ c. $48 \div 12 =$	4. a. $7 \div 2 =$ rem. b. $33 \div 9 =$ rem. c. $45 \div 4 =$ rem.
5. ✎ $2332 + 691$	6. ✎ $1142 - 483$	7. ✎ 6×361	8. ✎ $3129 \div 7$

Step 3: The Core Level Skills will be the main focus of Topic 1.
Complete what you can each week with your best effort and watch your skills grow over time

Entry Level Skills	**Core Level Skills**	**Advanced Level Skills**
1A. Calculate a. $5 + 1 =$ b. $5 - 2 =$	1B. Calculate a. $^-5 - 1 =$ b. $^-5 - 2 =$	1C. Calculate a. $^-3 - {}^-6 =$ b. $5 - {}^-3 =$
2A. Calculate a. $10 \times 11 =$ b. $3 \div 1 =$	2B. ✎ Evaluate $27 \div 3 - 4$	2C. ✎ Evaluate $105 - 3^4$
3A. ✎ Substitute $x = 6$ into $x + 8$ and evaluate.	3B. ✎ Substitute $x = 12$ into $\frac{x}{4}$ and evaluate.	3C. ✎ Substitute $x = 4$ into $4(x + 5)$ and evaluate.

4A. ✎ Solve the following:

$$x + 7 = 15$$

4B. ✎ Solve the following:

$$7x = 70$$

4C. ✎ Solve the following:

$$5(x + 1) = 15$$

5A. ✎ State the grid reference of the star below.

5B. Plot the point $A = (-3, 2)$ below and state the coordinates of point B.

$B = (\quad , \quad)$

5C. The point C is reflected in the x axis. Plot C', the image of C, and state its coordinates.

$C' =$

Step 4: Complete these worded questions of increasing difficulty. You may use a calculator at any time.

1. ✎ Harry left for school at 8:39am. He got to school at 9:07am. How long did it take Harry to get to school?

2. ✎ On special, a packet of pasta costs 97c. How much does 7 bags cost?

3. ✎ Noah bought 3 spring rolls and a $2 bag of chips. The cost was $11.90. What would 2 spring rolls and $1 bag of chips cost?
A. $9.90
B. $8.90
C. $8.60
D. $7.60

4. ✎ There are 330 people at a concert. For every 5 girls there are 6 boys. How many girls are at the concert?
A. 90
B. 275
C. 66
D. 150

5. ✎ Robin thinks of three numbers. If they are added in pairs the results are 38, 44 and 52. What is the largest of the three numbers?

mathsquad	Year 7 Topic 1 Homework Sheet 8	Name: Due date:

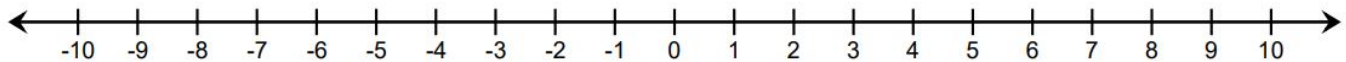**Step 1:** Times tables are all interconnected. Use previous answers to help with questions as needed

1. $10 \times 4 =$	5. $10 \times 7 =$	9. $2 \times 9 =$	13. $2 \times 8 =$	17. $2 \times 9 =$	21. $6 \times 12 =$
2. $1 \times 4 =$	6. $11 \times 7 =$	10. $4 \times 9 =$	14. $3 \times 8 =$	18. $10 \times 9 =$	22. $8 \times 4 =$
3. $2 \times 4 =$	7. $9 \times 7 =$	11. $8 \times 9 =$	15. $6 \times 8 =$	19. $12 \times 9 =$	23. $7 \times 11 =$
4. $0 \times 4 =$	8. $5 \times 7 =$	12. $7 \times 9 =$	16. $7 \times 8 =$	20. $8 \times 9 =$	24. $9 \times 9 =$

Step 2: The following Primary School maths skills involving the four basic operations underpin success in high school

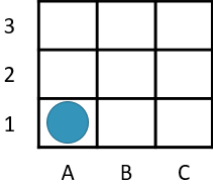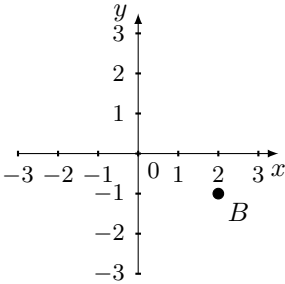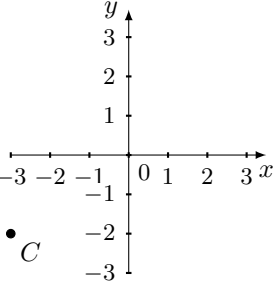| 1. a. $3 + 1 =$ b. $3 + 9 =$ c. $26 + 43 =$	2. a. $3 - 3 =$ b. $13 - 8 =$ c. $84 - 25 =$	3. a. $80 \div 10 =$ b. $20 \div 2 =$ c. $56 \div 8 =$	4. a. $5 \div 2 =$ rem. b. $11 \div 7 =$ rem. c. $6 \div 8 =$ rem.
5. ✎ $2179 + 212$	6. ✎ $424 - 231$	7. ✎ 7×661	8. ✎ $3177 \div 3$

Step 3: The Core Level Skills will be the main focus of Topic 1.
Complete what you can each week with your best effort and watch your skills grow over time

Entry Level Skills	**Core Level Skills**	**Advanced Level Skills**

1A. Calculate
  a. $0 + 6 =$
 	
  b. $6 - 6 =$
	1B. Calculate
	  a. $^-1 - 4 =$
	
	  b. $^-2 + 1 =$
		1C. Calculate
		  a. $^-1 + {}^-3 =$
		
		  b. $^-2 - {}^-6 =$

2A. Calculate
  a. $7 \times 2 =$
 	
  b. $11 \div 11 =$
	2B. ✎ Evaluate $4 \times 6 + 4$	2C. ✎ Evaluate $\sqrt{46 - 10}$

3A. ✎ Substitute $x = 7$ into $x + 8$ and evaluate.	3B. ✎ Substitute $x = 8$ into $6x$ and evaluate.	3C. ✎ Substitute $x = 6$ into $7(x + 3)$ and evaluate.

4A. ✎ Solve the following:	4B. ✎ Solve the following:	4C. ✎ Solve the following:
$$x + 9 = 15$$	$$9x = 18$$	$$21 = 9 + 4x$$

5A. ✎ State the grid reference of the circle below.	5B. Plot the point $A = (-2, 1)$ below and state the coordinates of point B.	5C. The point C is reflected in the x axis. Plot C', the image of C, and state its coordinates.
$B = (\quad, \quad)$	$C' =$

Step 4: Complete these worded questions of increasing difficulty. You may use a calculator at any time.

| 1. ✎ Kim started a fun run at 10:36am and finished at 11:19am on the same day. How long did it take Kim to finish the fun run? | 2. ✎ Swimming pool entry costs $2.80 per child. How many children can enter for $20?

A. 6
B. 7
C. 8
D. 56 | 3. ✎ A motorbike uses an average of 4 litres of fuel for every 100km travelled. At this rate, how many litres would the motorbike use to travel 250km? |

| 4. ✎ Hot dogs sell for $2.20 each and Natan sold one hot dog every two minutes at a festival. At this rate, how many minutes would it take to sell $110 worth of hot dogs?
A. 25 minutes
B. 50 minutes
C. 55 minutes
D. 100 minutes | 5. ✎ In how many ways can 75 be expressed as the sum of at least two positive integers, all of which are consecutive? |