

Mathematics Department



$$\frac{1}{\sqrt{10} + \sqrt{11}} + \frac{1}{\sqrt{11} + \sqrt{12}} + \frac{1}{\sqrt{12} + \sqrt{13}} = \frac{3}{\sqrt{10} + \sqrt{13}}$$

Equipment



- Pen (blue or black)
- Pencil
- Scientific Calculator
- Ruler (15cm is fine)
- Geometry Set (compass, protractor)
- Green Pen



Topics to be covered in Year 7



Angle rules

Sequences

Calculations with fractions

Adding with negative numbers

Four operations

Calculations involving percentages

Find missing angles

Area of 2D shapes

Introduction to algebra

Number properties

Calculations with decimals

Expand brackets

Constructions

Factorise

Perimeter of 2D shapes

LEARN
ASPIRE
EXCEED

In year 7 you will have three hours of mathematics per week.

Timestable Rockstar



1 $10 \times 3 =$ _____

2 $7 \times 9 =$ _____

3 $4 \times 12 =$ _____

4 $11 \times 9 =$ _____

5 $9 \times 3 =$ _____

6 $11 \times 11 =$ _____

7 $8 \times 1 =$ _____

8 $12 \times 4 =$ _____

9 $10 \times 11 =$ _____

10 $8 \times 12 =$ _____

21 $10 \times 2 =$ _____

22 $5 \times 5 =$ _____

23 $6 \times 11 =$ _____

24 $9 \times 12 =$ _____

25 $7 \times 6 =$ _____

26 $4 \times 8 =$ _____

27 $12 \times 7 =$ _____

28 $4 \times 7 =$ _____

29 $3 \times 1 =$ _____

30 $12 \times 2 =$ _____

41 $2 \times 10 =$ _____

42 $9 \times 10 =$ _____

43 $6 \times 12 =$ _____

44 $11 \times 9 =$ _____

45 $9 \times 12 =$ _____

46 $1 \times 10 =$ _____

47 $12 \times 12 =$ _____

48 $3 \times 3 =$ _____

49 $1 \times 3 =$ _____

50 $10 \times 11 =$ _____

Close to 9000



Take four copies of the number 1234.
Re-arrange the digits in each number so that the
four numbers sum as close as possible to 9000.

90000?

1234
1234
1234
+ 1234
<hr/>
4946

90000?

4321
3241
1234
+ 1234
<hr/>
10030

It is impossible to get the total be exactly 9000.
Can you show this?

Hint

X

Always, sometimes or never true?



$$\begin{array}{r} ABC \\ DEF \\ + GHI \\ \hline \end{array} = \begin{array}{r} DEI \\ GHC \\ + ABF \\ \hline \end{array}$$

$$\begin{array}{r} ABC \\ DEF \\ + GHI \\ \hline \end{array} = \begin{array}{r} BAC \\ EFD \\ + IGH \\ \hline \end{array}$$

If a statement is “sometimes true”, determine which values of the letters it is true for.

Write a number...



Write a number which satisfies each set of the given properties.

A multiple of 7
An even
number

A multiple of 9
An odd number
Greater than 40

A multiple of 2
NOT a multiple
of 4

A multiple of 5
A multiple of 3
Greater than 20

A multiple of 2
A multiple of 3
Greater than 30

A multiple of 3
NOT a multiple
of 9
Greater than 35

Number Sort



	Square number	Multiple of 5	Factor of 48	Factor of 24
Odd				
Even				
Multiple of 3				
Factor of 100				

9 100 15 8 24 35 6 3

49 25 36 4 2 1 10 12