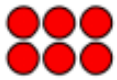
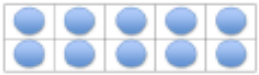
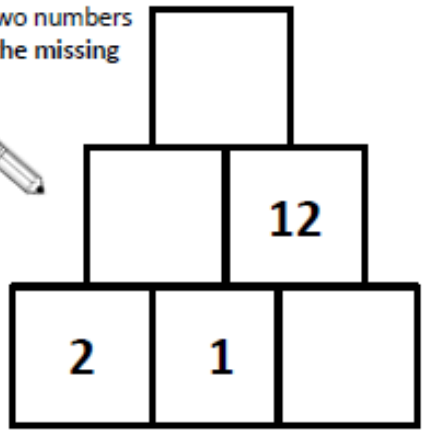
# Timestable Challenge x1

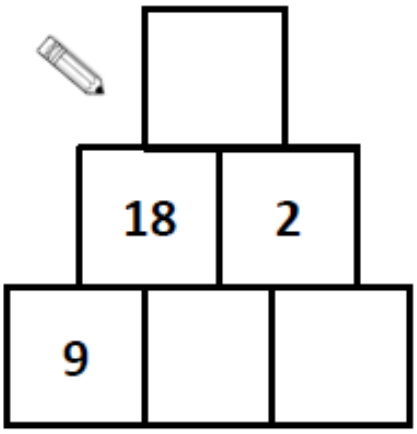
| | |
|---|---|
| 2 x ☐ = 16 | 2 = ☐ x 2 |
| ☐ x 2 = 6 | 2 x ☐ = 0 |
| 14 = ☐ x 2 | ☐ x 2 = 8 |
| 2 x ☐ = 22 | 2 x ☐ = 20 |
| 4 = ☐ x 2 |  3 x ☐ = 6 |
| ☐ x 2 = 18 |  ☐ = 2 x 8 |
| ☐ x 2 = 10 |  ☐ x 5 = 10 |
| ☐ x 2 = 24 |  12 = ☐ x ☐ |
| 12 = ☐ x 2 | 2 x ☐ = 9 x ☐ |

Here is a multiplication grid.
Fill in the missing numbers.

| x | | | 11 |
|---|---|---|---|
| 2 | 12 | | |
| 4 | | 8 | |
| | 48 | | |

Here is a number pyramid.
The number in a box is the product of the two numbers below it. Write the missing numbers:



# Timestable Challenge x2

If you know that **2 x 3 = 6**, you know that **2 x 6 =** ☐

If you know that **14 = 7 x 2**, you know that ☐ **= 14 x 2**

If you know that **10 = 5 x 2**, you know that ☐ **= 10 x 2**

If you know that **11 x 2 is equal to 22**,
what is **22 x 2 equal to?** ☐

| | | | |
|---|---|---|---|
| **2 x 3 = 6** | 2 x 6 = | 2 x 12 = | 2 x 24 = |
| **16 x 2 = 32** | 8 x 2 = | 4 x 2 = | 2 x 2 = |

**2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 2 x** ☐

**2 + 2 + 2 + 2 + 2 + 2 = 2 x** ☐

How many 2s are there in 18? ☐

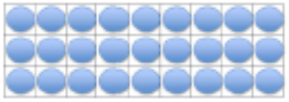
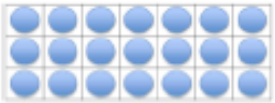
How many 2s are there in 24? ☐

Mike says,

***'Every multiple of 2 ends in 2'***

Is Mike correct? YES/NO **Explain** how you know:

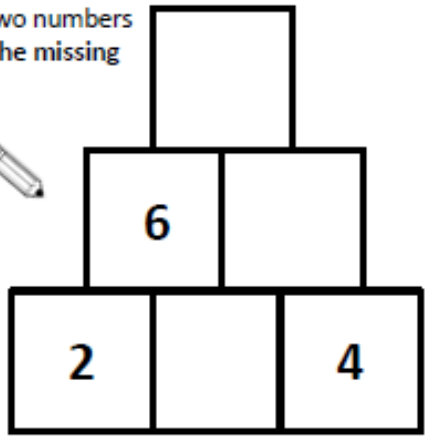
# Timestable Challenge x 3

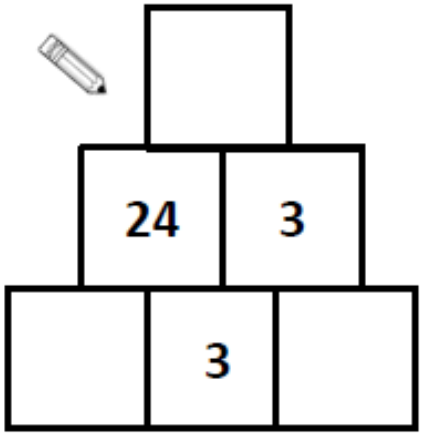
| | |
|---|---|
| 3 x ☐ = 9 | 3 = ☐ x 3 |
| ☐ x 3 = 0 | 3 x ☐ = 27 |
| 15 = ☐ x 3 | ☐ x 3 = 24 |
| 3 x ☐ = 36 | 3 x ☐ = 30 |
| 12 = ☐ x 3 | 3 x ☐ = 6 |
| ☐ x 3 = 18 |  ☐ = 9 x 3 |
| ☐ x 3 = 33 |  ☐ x 7 = 21 |
| ☐ x 3 = 21 |  15 = ☐ x ☐ |
| 6 = ☐ x 3 | 3 x ☐ = 8 x ☐ |

Here is a multiplication grid.
Fill in the missing numbers.

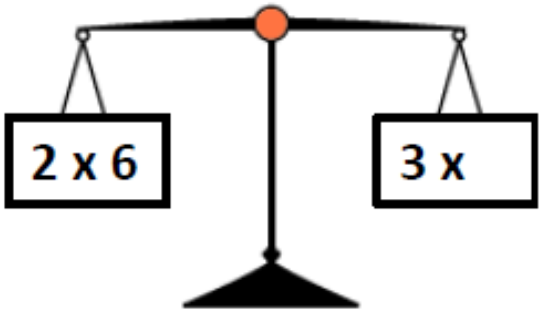
| x | 4 | 3 | 6 |
|---|---|---|---|
| | | 9 | |
| | 8 | | 12 |
| 5 | | | |

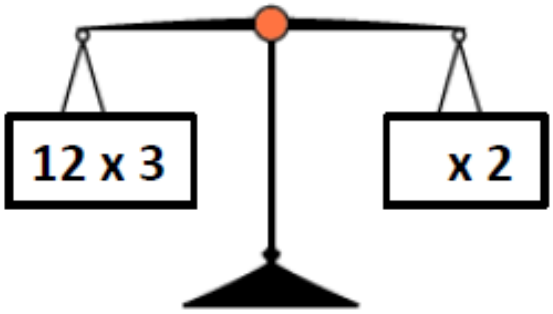
Here is a number pyramid.
The number in a box is the **product** of the two numbers below it. **Write the missing numbers:**

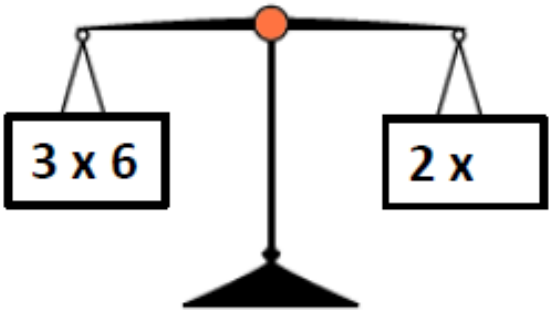


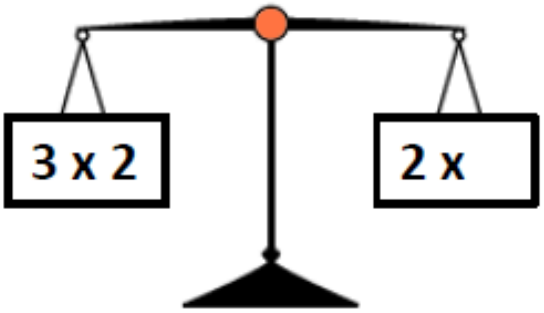



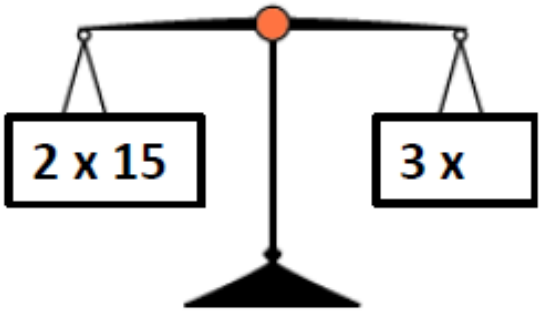
# Timestable Challenge x 4

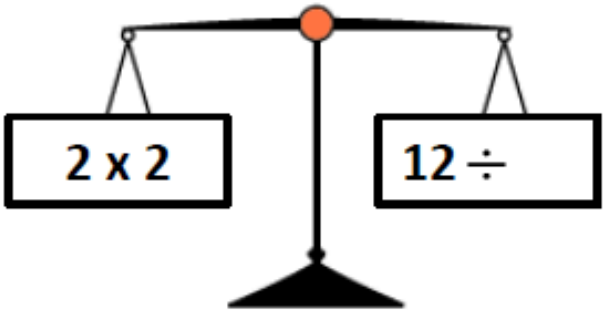


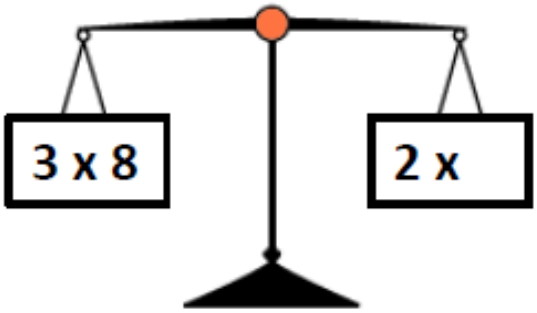



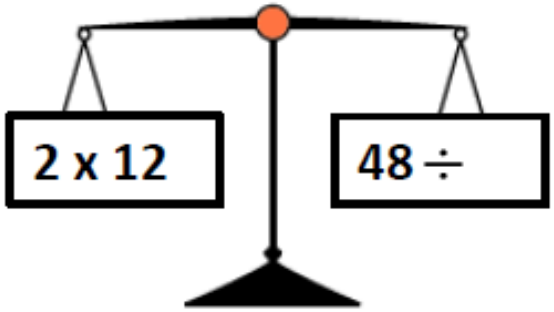



# Timestable Challenge x 4

4 x ☐ = 16

52 = ☐ x 4

☐ ÷ 4= 50

☐ x 4= 40

☐ ÷ 4= 20

☐ x 4= 80

48 = ☐ x 4

4 x ☐ = 12

36 ÷ ☐ = 4

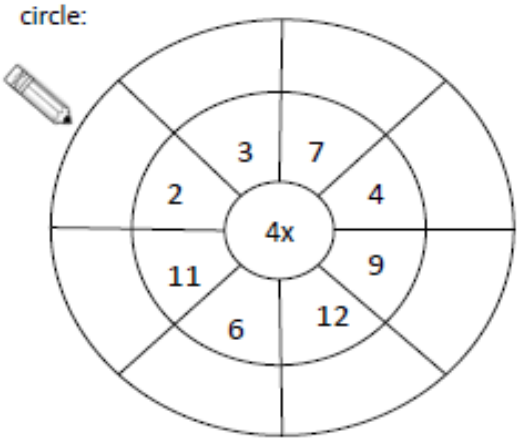
☐ x 4= 8

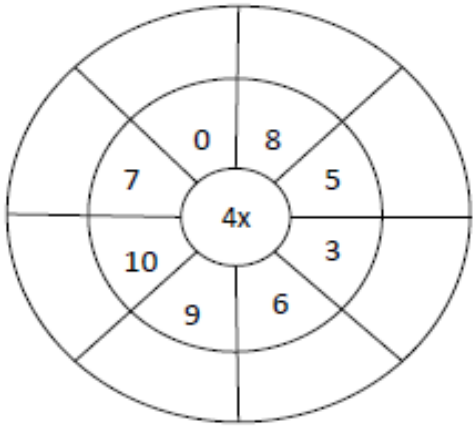
☐ x 4= 24

☐ ÷ 4 = 7

44 = ☐ x 4

Here are some multiplication wheels. To complete them, multiply the number in the middle by numbers in the next circle:




If you know that **10 x 4= 40**, you know that **20 x 4=** ☐

If you know that **8 x 4= 32**, you know that **8 x 8=** ☐

If you know that **12 x 4= 48**, you know that **12 x 8=** ☐

If you know that **10 x 4= 40**, you know that **10 x 8=** ☐

# Timestable Challenge x 4

**4 x 7 = 28**

Write 3 other facts that you can derive from the one above:

1. _____
2. _____
3. _____

**36 = 4 x 9**

Write 3 other facts that you can derive from the one above:

1. _____
2. _____
3. _____

**48 ÷ 4 = 12**

Write 3 other facts that you can derive from the one above:

1. _____
2. _____
3. _____

**How many different factor pairs can you generate for the following number?**

**48**

Here are some multiplication grids. Fill in the missing numbers:

| x | | 7 | |
|---|---|---|---|
| 4 | | | 12 |
| | | 56 | |
| 11 | 66 | | |

| x | 8 | | 3 |
|---|---|---|---|
| | | | 18 |
| 12 | | 48 | |
| | 40 | | |

Joseph says,

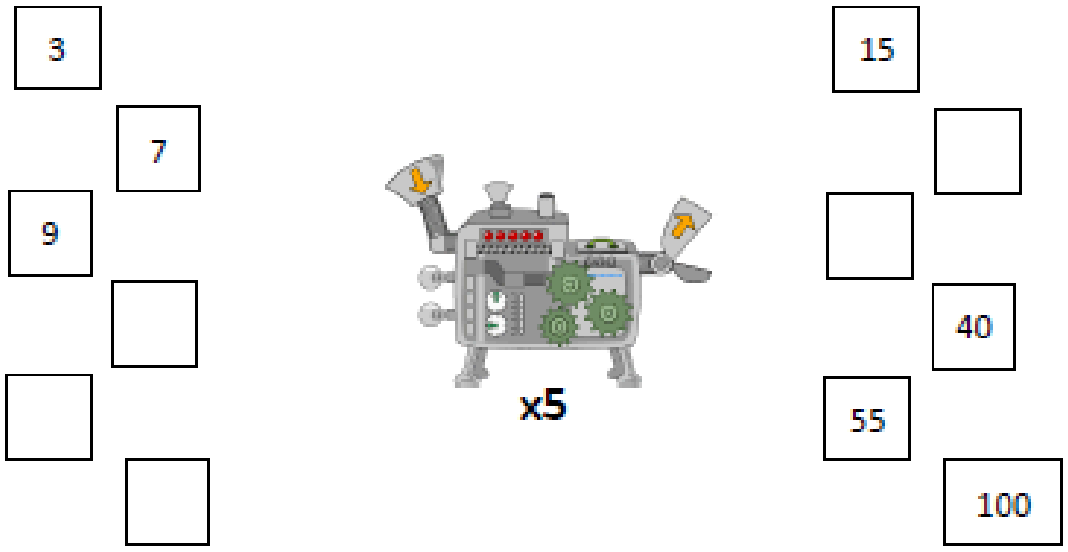
***'Every multiple of 4 is also a multiple of 8'***

Is Joseph correct? YES/NO **Explain** how you know:

# Timestable Challenge x 5

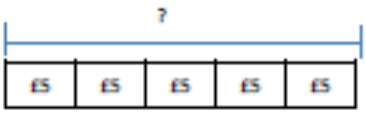
| | | |
|---|---|---|
| 5 x ☐ = 20 | 5 x ☐ = 50 | |
| ☐ x 5 = 0 | 45 = ☐ x 5 | 5 x 20 = ☐ |
| 40 = ☐ x 5 | ☐ x 5 = 35 |  5 x ☐ = 20 |
| 5 x ☐ = 25 | 3 x 50 = ☐ |  ☐ ÷ 5 = 2 |

Below is a number function machine. Can you fill in the gaps, using your knowledge of the 5 times tables? The first one is done for you.



# Timestable Challenge x5

Mrs Jones had 7 children. She wanted to give each one of them £5 to spend at the fair. How much money would Mrs Jones need?




If 5 x 9 = 45, what is5 x 18? Explain how you worked it out:

What are five lots of 12? ☐

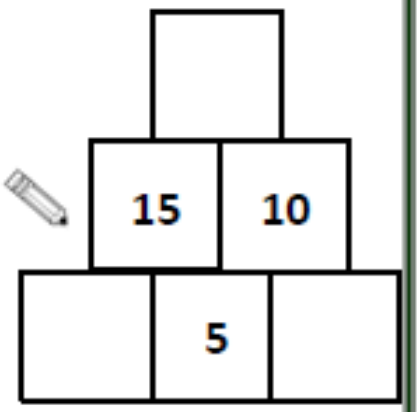
What is 5 x 5 x 5? ☐

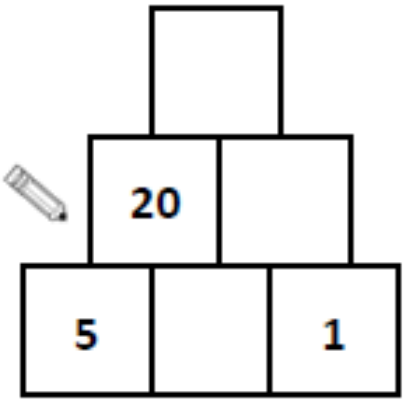
What are the next two numbers in this sequence:
120 115 110 105 ☐

How many fives are there in 35? ☐

How many fives are there in 65? ☐

**Here is a number pyramid.**
**The number in a box is the product of the two numbers below it. Write the missing numbers:**



# Timestable Challenge x6

6 x ☐ = 42

0 = ☐ x 6

☐ x 6 = 18

6 x ☐ = 60

30 = ☐ x 6

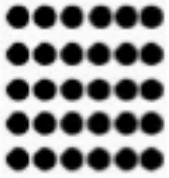
☐ x 6 = 30

6 x ☐ = 48

 ☐ = 6 x 4

12 = ☐ x 6

What division fact does this array show:



☐

☐ x 6 = 54

☐ x 6 = 72

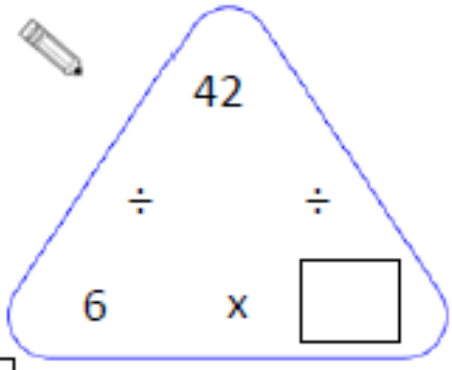
2 x ☐ =6 x ☐

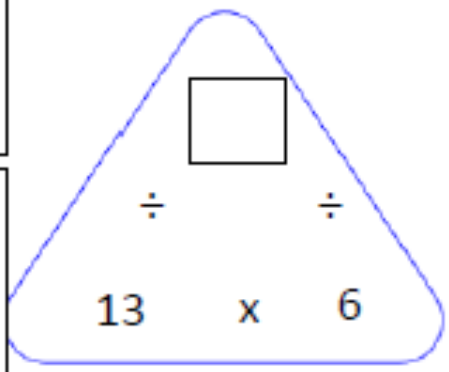
☐ x 6 = 36

6 x ☐ = 4 x ☐

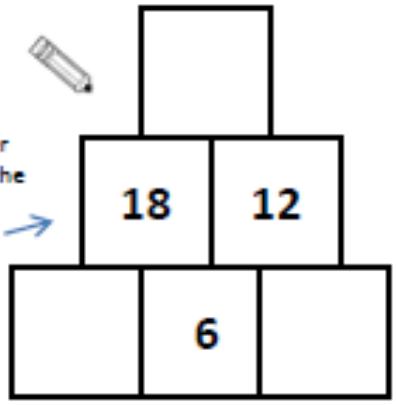
24 = ☐ x 6

Here are some multiplication triangles. Fill in the gaps




Here is a number pyramid. The number in a box is the **product** of the two numbers below it. **Write the missing numbers:**



# Timestable Challenge x6

If you know that 2 x 6 = 12, you know that 2 x 18 = ☐

If you know that 24 = 6 x 4, you know that ☐ = 12x 4

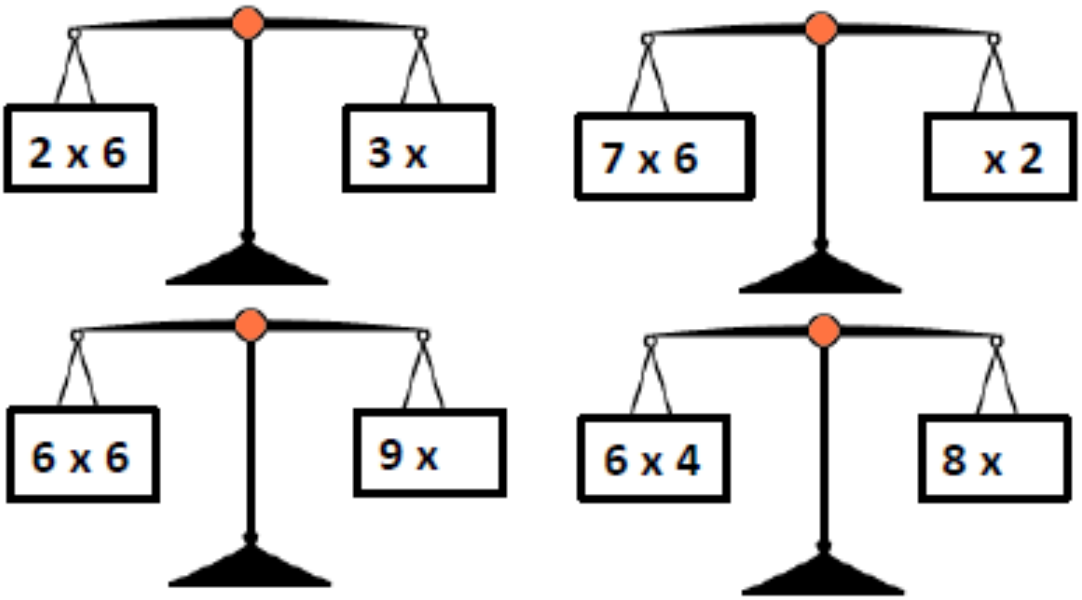
How many 6s are there in 54? ☐

If you know that 10 x 6 is equal to 60, what is 20 x 6 equal to? ☐

How many 6s are there in 24? ☐

6 + 6 + 6 + 6 + 6 + 6 + 6 = 6 x ☐

| | | | |
|---|---|---|---|
| 6 x 2 = 12 | 6 x 4 = | 6 x 8 = | 6 x 16= |



# Timestable Challenge x 7

| | |
|---|---|
| 7 x ☐ = 42 | 49 ÷ 7 = ☐ |
| ☐ x 7 = 63 | 28 ÷ ☐ = 7 |
| 84= ☐ x 7 | ☐ ÷ 7 = 3 |
| 7 x ☐ = 56 | 63 ÷ 7 = ☐ |
| 77= ☐ x 7 | ☐ ÷ 7 = 5 |

**28 = 7x 4**

Write 3 other facts that you can derive from the one above:

1. _____
2. _____
3. _____

**56 ÷ 7= 6**

Write 3 other facts that you can derive from the one above:

1. _____
2. _____
3. _____

Circle all the multiples of 7 below:

13 21 32 35 58 63 74

84 96 103 140

Mrs Cooper had 67 pencils to sort into boxes of 7. How many boxes will she be able to fill? ☐

What are seven lots of 16? Explain how you worked it out:

Here is a multiplication grid. Fill in the missing numbers.

| x | | 5 | |
|---|---|---|---|
| 12 | | | 84 |
| 8 | 56 | | |
| | | 45 | |

# Timestable Challenge x 7

True or false:

$63 \div 7 = 64 \div 8$

Explain how you know:

True or false:

$7 \times 7 + 6 = 11 \times 5$

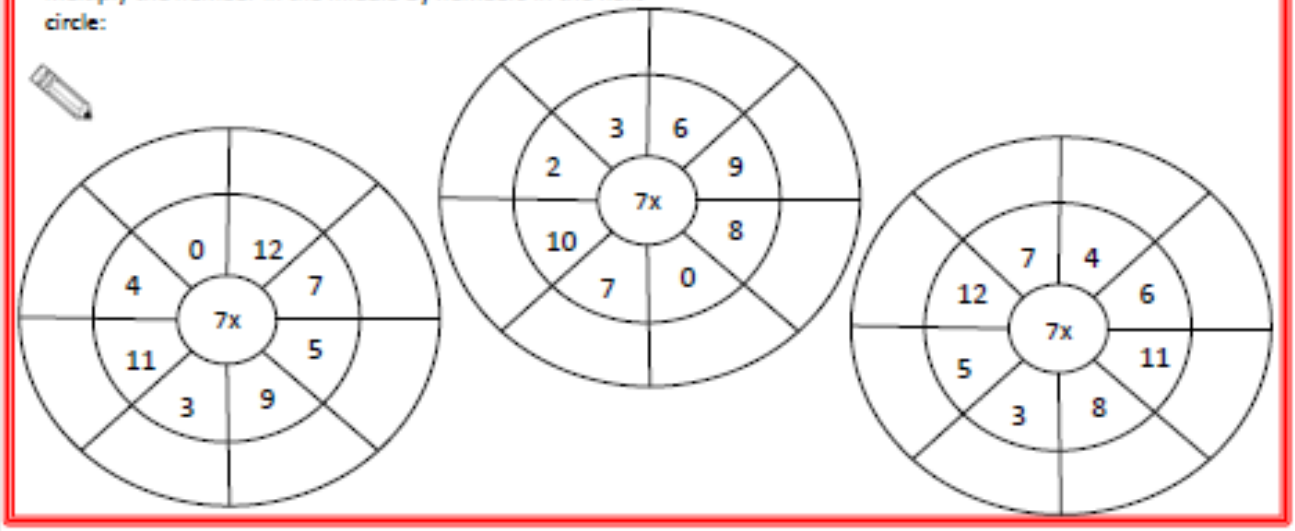
Explain how you know:

Paul says,

*'If the digits in a two digit number can add up to be equal to 7, the number is a multiple of 7.'*

Is Paul 's statement always, sometimes or never correct? **Explain** how you know:

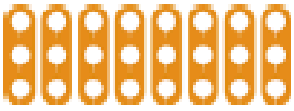
Here are some multiplication wheels. To complete them, multiply the number in the middle by numbers in the next circle:



# Timestable Challenge x 8

| | |
|---|---|
| 8 x ☐ = 16 | 72 ÷ 8 = ☐ |
| ☐ x 8 = 48 | 56 ÷ ☐ = 8 |
| 32 = ☐ x 8 | ☐ ÷ 8 = 5 |

| | |
|---|---|
| 8 x ☐ = 88 | 24 ÷ 8 = ☐ |

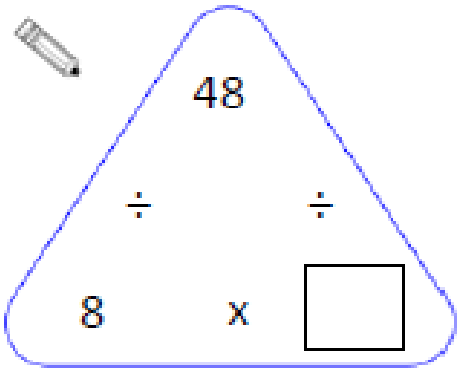


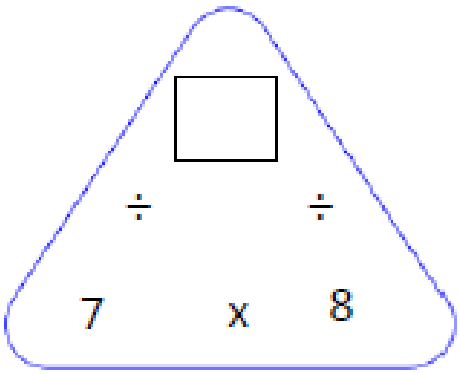
What multiplication fact does this array show?

☐

Here are some multiplication triangles. Fill in the gaps

- What is 8 x 8? ☐
- What is the next number in this sequence: ☐
  32 40 48 56 64
- How many eights are there in 24? ☐
- How many eights are there in 88? ☐
- How many eights are there in 64? ☐
- How many eights are there in 104? ☐



# Timestable Challenge x8

Draw a line to match the corresponding maths facts:

8 + 8 + 8 + 8

9 + 9 + 9

6 + 6 + 6 + 6

27

32

24

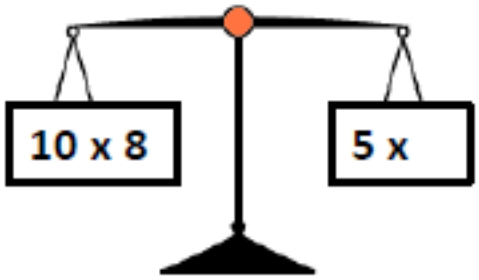
88 = ☐ x 8

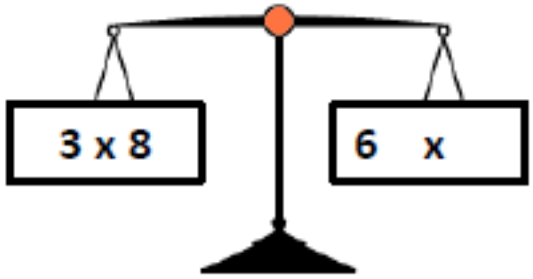
8 x ☐ = 48

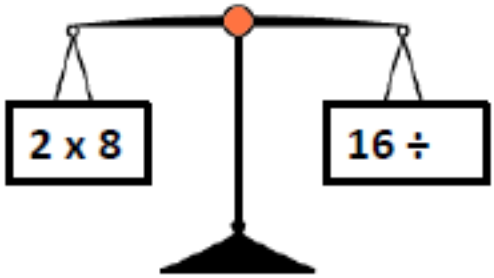
64 ÷ ☐ = 8

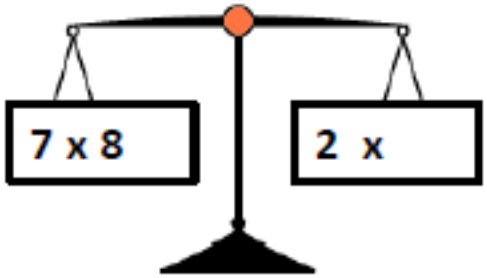
☐ x 8 = 32

☐ x 8 = 96



# Timestable Challenge x9

| | |
|---|---|
| 9 x ☐ = 54 | 72 ÷ 9 = ☐ |
| ☐ x 9 = 27 | 54 ÷ ☐ = 9 |
| 63 = ☐ x 9 | ☐ ÷ 9 = 7 |
| 9 x ☐ = 81 | 108 ÷ 9 = ☐ |
| 108= ☐ x 9 | 9 ÷ ☐ = 0 |
| ☐ x 9 = 36 | ☐ ÷ 9 = 90 |

☐ = 9 x 3

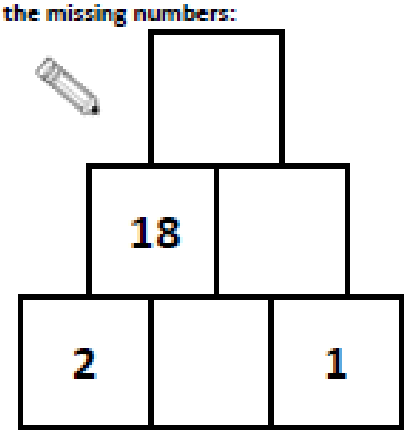
Below, draw an array to show what 5 x 9 =

Here is a multiplication grid.
Fill in the missing numbers.

| x | | 8 | |
|---|---|---|---|
| 3 | | | 21 |
| 9 | 81 | | |
| | | 32 | |

| x | 11 | | 7 |
|---|---|---|---|
| | | | 28 |
| 12 | | 96 | |
| | 99 | | |

Here is a number pyramid.
The number in a box is the product of the two numbers below it. Write the missing numbers:



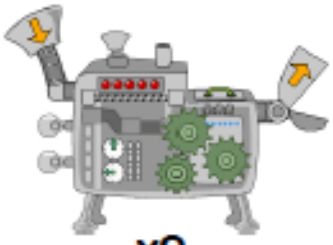
# Timestable Challenge x9

On the grid below, highlight all of the multiples of 9.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

What patterns can you notice in the multiples of 9? Describe these below, using mathematical vocabulary where possible:

Below is a number function machine. Can you fill in the gaps, using your knowledge of the 9 times tables? The first one is done for you.




| | |
|---|---|
| 4 | 36 |
| 7 | |
| 12 | |
| | 72 |
| | 27 |
| | 108 |

# Timestable Challenge x10

3 x ☐ = 30

20 = ☐ x 10

☐ ÷ 10 = 5

☐ x 10 = 110

☐ ÷ 7= 10

☐ x 10 = 160

60 = ☐ x 10

10 x ☐ = 60

90 ÷ ☐ = 9

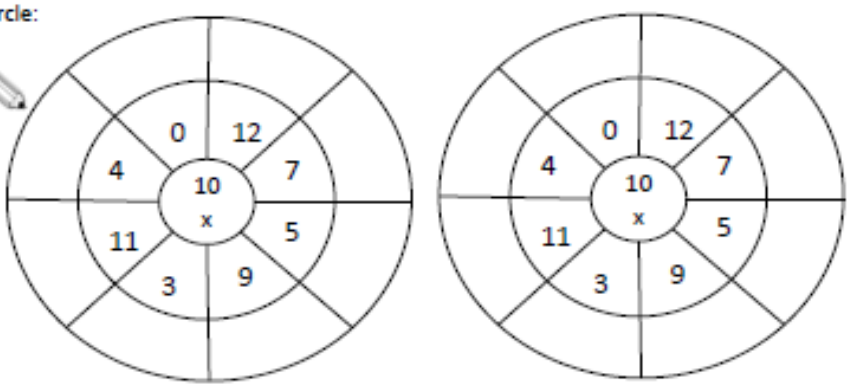
☐ x 10 = 40

☐ x 10 = 120

☐ ÷ 10 = 10

90 = ☐ x 10

Here are some multiplication wheels. To complete them, multiply the number in the middle by numbers in the next circle:




If you know that **4 x 10 = 40**, you know that **4 x 20** = ☐

If you know that **8 x 10 = 80**, you know that **8 x 20** = ☐

If you know that **12 x 10 = 120**, you know that **12 x 40** = ☐

If you know that **3 x 10 = 30**, you know that **3 x 20** = ☐

# Timestable Challenge x10

Gavin says,

*'If I need to multiply a number by 100, I can multiply it by 10 and then multiply my answer by 10 again.'*

Is Gavin right?
Explain how you know:

How many tens are there in 100? ☐

What is 10 x 10 x 10? ☐

What is the next number in this sequence:
600 60 6 0.6 ☐

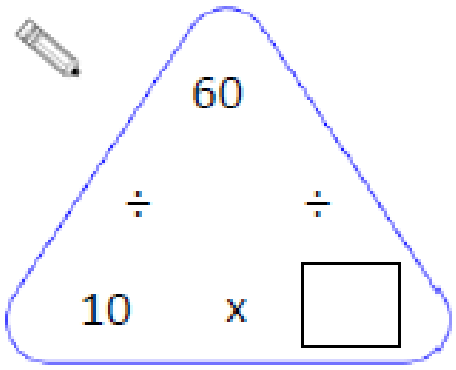
How many tens are there in 40? ☐

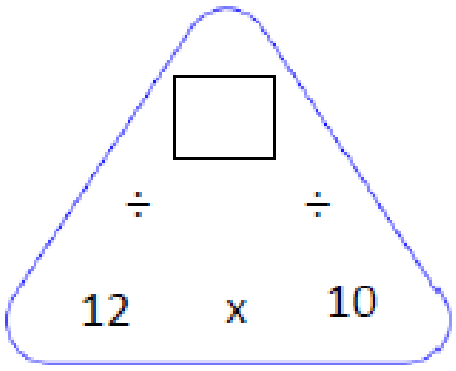
How many tens are there in 300? ☐

How many tens are there in 190? ☐

How many tens are there in 8,600? ☐

Here are some multiplication triangles. Fill in the gaps



# Timestable Challenge x11

3 x ☐ = 33

0 = ☐ x 11

11 x ☐ = 143

☐ x 11 = 121

11 x ☐ = 66

☐ x 11 = 33

66 = ☐ x 11

11 x ☐ = 132

99 ÷ ☐ = 9

☐ x 7 = 77

☐ x 11 = 110

☐ ÷ 11 = 12

99 = ☐ x 11

**8 x 11 = 88**

Write 3 other facts that you can derive from the one above:

1. _____
2. _____
3. _____

**110 = 11 x 10**

Write 3 other facts that you can derive from the one above:

1. _____
2. _____
3. _____

**44 ÷ 4 = 11**

Write 3 other facts that you can derive from the one above:

1. _____
2. _____
3. _____

Here are some multiplication grids. Fill in the missing numbers:

| x | 12 | | 4 |
|---|---|---|---|
| | | | 36 |
| 8 | | 48 | |
| | | | 44 |

| x | | 11 | |
|---|---|---|---|
| 9 | | | 81 |
| | | 132 | |
| 7 | 21 | | |

# Timestable Challenge x11

If you know that **7 x 11 = 77**, you know that **77 ÷ ☐ = 11**

If you know that **11 x 4 is equal to 44**, what is **22x 2 equal to?** ☐

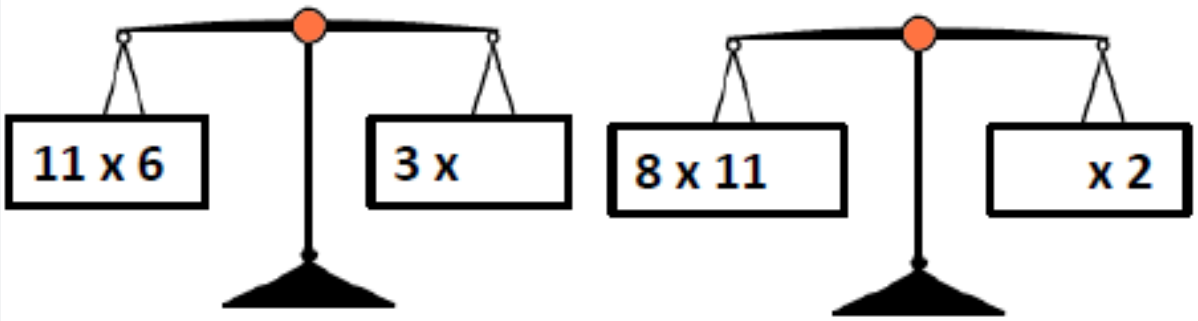
**Fill in the answers:**

| | | | |
|---|---|---|---|
| **11 x 2 = 22** | 11 x 4 = | 11 x 8 = | 11 x 16= |
| **121 ÷ 11 =** | **99 ÷ 11 =** | **11 ÷ 11 =** | **110 ÷ 11 =** |

Harriet says,

***'I think of a number and multiply it by 11. My answer is 86.'***

Is Harriet correct? **Explain** how you know:



# Timestable Challenge x12

12 x ☐ = 72

0 = ☐ x 12

☐ x 12 = 120

12 x ☐ = 48

96 = ☐ x 12

☐ x 12 = 132

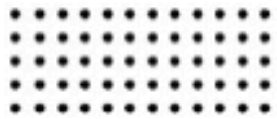
12 x ☐ = 36

12 X ☐ = 96

84= ☐ x 12

12 x ☐ = 108

☐ x 12 = 120

 ☐ = 12 x 5

☐ x 12 = 24

 ☐ x 12 = 36

☐ x 12 = 60

12 x ☐ = 7 x ☐

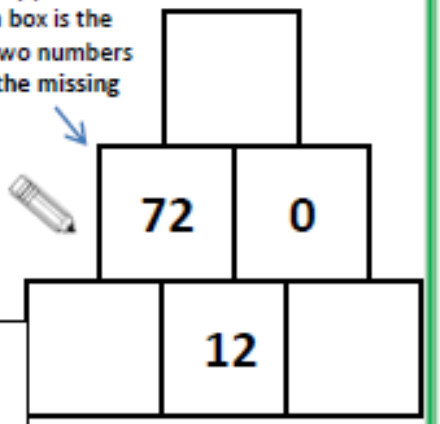
144 = ☐ x 12

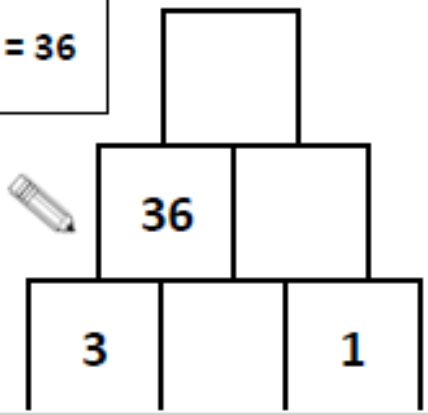
96 ÷ ☐ = 12

Here is a multiplication grid.
Fill in the missing numbers.

| x | 7 | | 9 |
|---|---|---|---|
| 12 | | 132 | |
| | 42 | | 54 |
| | | 33 | |

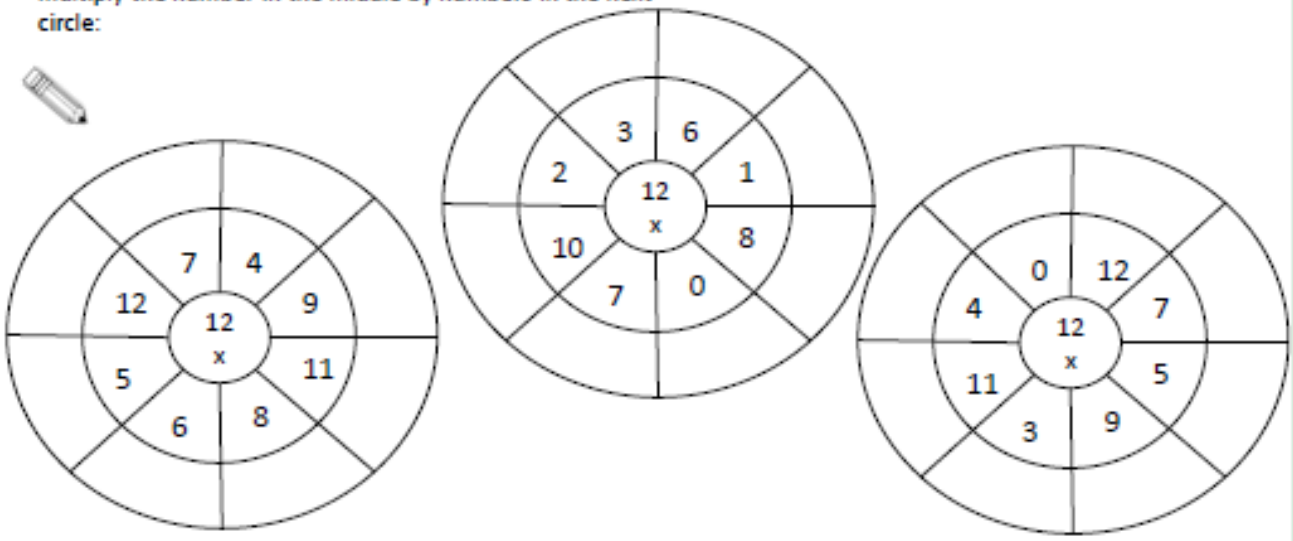
Here is a number pyramid.
The number in a box is the product of the two numbers below it. Write the missing numbers:



# Timestable Challenge x12

Here are some multiplication wheels. To complete them, multiply the number in the middle by numbers in the next circle:

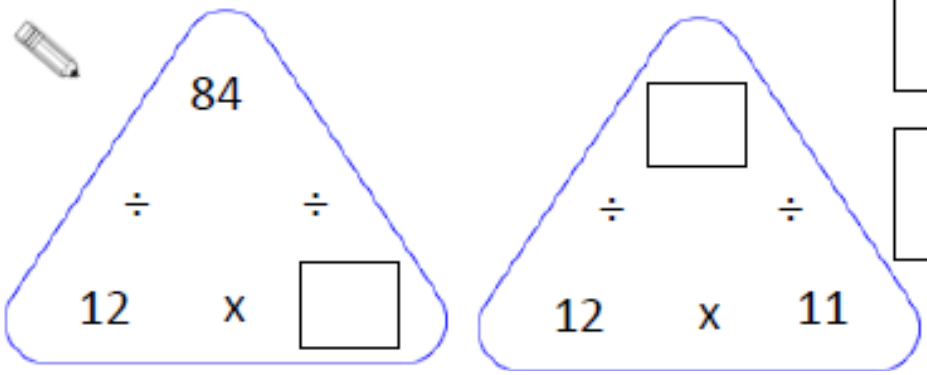



Louise says,

*'If I double the answer to 3 x 12, I will get the answer to 6 x 12.'*

Is Louise correct? YES/NO **Explain** how you know:

Here are some multiplication triangles. Fill in the gaps




**12 x 12 =** ☐

**108 ÷** ☐ **= 12**