

My Maths

Divide Decimals by Whole Numbers

When dividing decimals by whole numbers use the bus stop method of division as normal.

Place the decimal point for the quotient directly above the decimal point in the dividend.

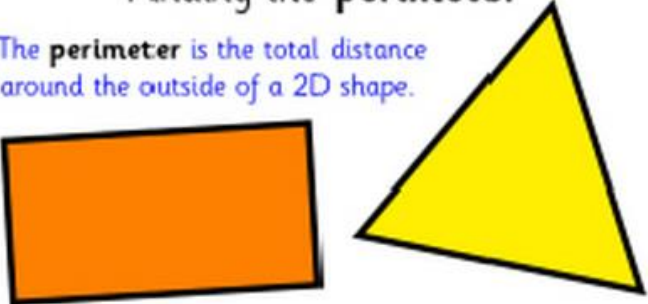
$$\begin{array}{r} 21.2 \\ 4 \overline{) 84.8} \end{array}$$

Follow the usual process for short division working round the decimal point.

My Maths-Perimeter

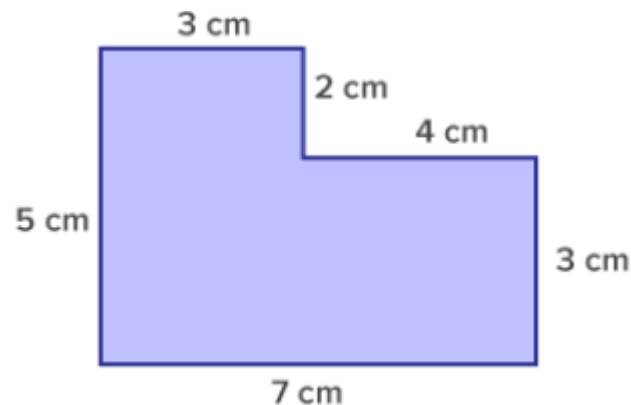
Finding the perimeter

The **perimeter** is the total distance around the outside of a 2D shape.



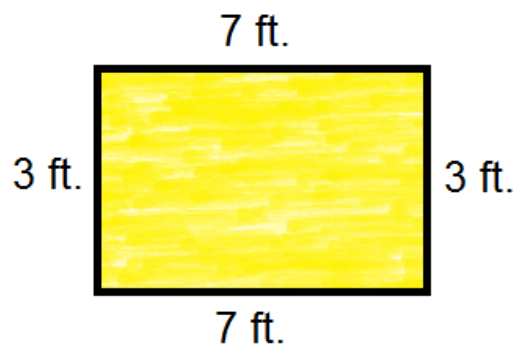
To find the perimeter of any straight-sided shape, just **add up the length of all the sides**.

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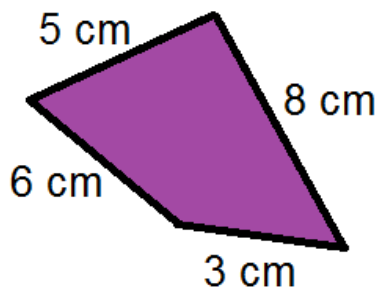
$$5 + 3 + 2 + 4 + 3 + 7$$
$$= 24 \text{ cm}$$

Finding Perimeter



$$7 + 3 + 7 + 3 = 20$$

The perimeter is 20 feet.



$$5 + 8 + 3 + 6 = 22$$

The perimeter is 22 cm.

Tuesday – LBQ

Reasoning: Properties of Numbers

- A **factor** is a number that divides into another number exactly and without leaving a remainder.
- Most numbers have an even number of factors; however, a **square number** has an odd number of factors.
- A **prime number** has only two factors - the number itself and 1.
- A **prime factor** is a **factor** that is a **prime** number. In other words: any of the **prime** numbers that can be multiplied to give the original number. Example: The **prime factors** of 15 are 3 and 5 because $3 \times 5 = 15$, and 3 and 5 are **prime** numbers
- A **common multiple** is a number that is a **multiple** of two or more numbers e.g. a common multiple of 3 and 4 is 12
- A **composite number** is a positive number (not negative) which is not a prime number e.g. 6 is a composite number but 7 isn't

My Maths- Squares and Cubes

Square Numbers

When a number has been multiplied by itself, we say that the answer is a square number.

$1 \times 1 = 1$



$2 \times 2 = 4$



$3 \times 3 = 9$



We can write three squared as 3×3 or 3^2

$1 \times 1 = 1$

$2 \times 2 = 4$

$3 \times 3 = 9$

$4 \times 4 = 16$

$5 \times 5 = 25$

$6 \times 6 = 36$

$7 \times 7 = 49$

$8 \times 8 = 64$

$9 \times 9 = 81$

$10 \times 10 = 100$

$11 \times 11 = 121$

$12 \times 12 = 144$

4^3

This means **four cubed** or **four to the power of three**. It means there have been three fours multiplied together.

$4^3 = 4 \times 4 \times 4 = 64$



Have a look at this picture of the cube. Can you explain how it links to 4^3 ?



 $1^3 = 1 \times 1 \times 1 = 1$

$2^3 = 2 \times 2 \times 2 = 8$ 

 $3^3 = 3 \times 3 \times 3 = 27$

$4^3 = 4 \times 4 \times 4 = 64$ 

Want to learn more? Go to this website to watch a video and take a quiz.

<https://www.bbc.co.uk/bitesize/topics/zyhs7p3/articles/z2ndsrd>

My Maths- Time and Timetables

What is the 24-hour clock?

- The 24-hour clock is more often shown on digital clocks and is written in a 4-digit form, with the first two digits representing the hour and the last two representing the minutes.
- There is no need for a.m. or p.m. as each time represents each hour in a 24-hour day. For example, 0300 = 3rd hour of the day, or 3am; 1400 = 14th hour of the day, or 2pm; 1830 = 30 minutes past the 18th hour of the day, or 6.30pm
- To convert from a 12-hour clock to a 24-hour clock add 12 to the hours after midday, e.g. 3pm becomes 15:00 because $3 + 12 = 15$. 8pm becomes 20:00 because $8 + 12 = 20$.

12 hour	24 hour
4:25am	<u>04:25</u>
9:20am	<u>09:20</u>
2:55am	<u>02:55</u>
11:35am	<u>11:35</u>
1:07am	<u>01:07</u>
12:42am	<u>00:42</u>
6:13am	<u>06:13</u>

You do not add 12 to am times but you must ensure there are 4 digits.

My Maths- Time and Timetables

If you want to revise converting 12 hour to 24 hour time in more depth then watch this video: <https://www.youtube.com/watch?v=6zwTu1-GzAA>

London Euston	0640	1425	2205
Watford Junction	0655	1440	—
Milton Keynes Central	0715	1506	2248
Northampton	—	—	—
Rugby	—	1514	—
Coventry	0749	1524	2352
Birmingham Intl	0802	1539	0005
Birmingham New Street	0814	1551	0017
Wolverhampton	0841	—	0052

How long does the 06:40 from Euston take to get to Coventry?

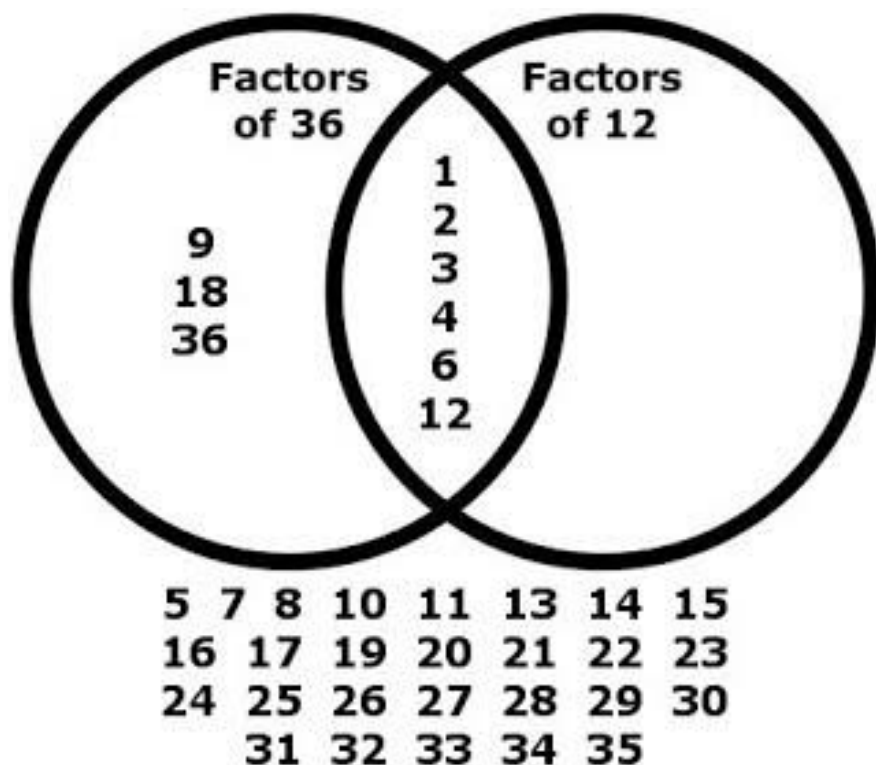
Arrives 07:49 so 06:40 until 07:49 = 1 hour 9 minutes.

The 15:14 from Rugby is running 30 minutes late – what time will it arrive in Birmingham New Street?

Should arrive 15:51 so 15:51 plus 30 minutes = 16:21

Thursday – LBQ

Solve one step problems – Properties of Numbers



Pentagon – 5 sided shape

Heptagon – 7 sided shape

Octagon – 8 sided shape

Nonagon – 9 sided shape

Only factors of 36 go in the left section.

Only factors of 12 go in the right section.

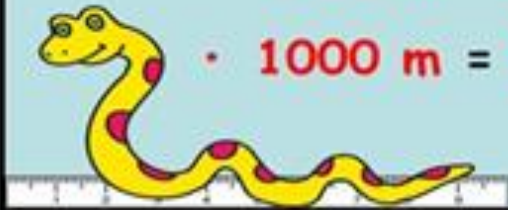
Factors of both 36 and 12 go in the middle section.

My Maths – Units of Length

Converting Units of Length

To be able to convert units of length you need to know...

- $10 \text{ mm} = 1 \text{ cm}$
- $100 \text{ cm} = 1 \text{ m}$
- $1000 \text{ m} = 1 \text{ km}$



Converting Units of Length

Knowing that $10 \text{ mm} = 1 \text{ cm}$ you can change from millimetres to centimetres by **dividing** by 10. For example...

20 mm can be converted to centimetres by **dividing** 20 by 10...

$$20 \text{ mm} = 2 \text{ cm}$$



Converting Units of Length

To convert metres to centimetres you have to **multiply** by 100. For example...

5 m can be converted to centimetres by **multiplying** 5 by 100.

$$5 \text{ m} = 500 \text{ cm}$$



Comparing Lengths

The easiest way to compare lengths is to **convert** them into the **same unit of measurement**. For example...



The **yellow** snake is **25 cm** long and the **green** snake is **150 mm** long.

Which snake is the **longest**?

Convert both measurements to centimetres...

Yellow snake = **25 cm**

Green snake = **15 cm**

The **yellow** snake is the longest.

Friday – LBO

Properties of Numbers Topic Review

- A **composite number** is a positive number (not negative) which is not a prime number e.g. 6 is a composite number but 7 isn't
- A **prime number** has only two factors - the number itself and 1.
- A **prime factor** is a **factor** that is a **prime** number. In other words: any of the **prime** numbers that can be multiplied to give the original number. Example: The **prime factors** of 15 are 3 and 5 because $3 \times 5 = 15$, and 3 and 5 are **prime** numbers