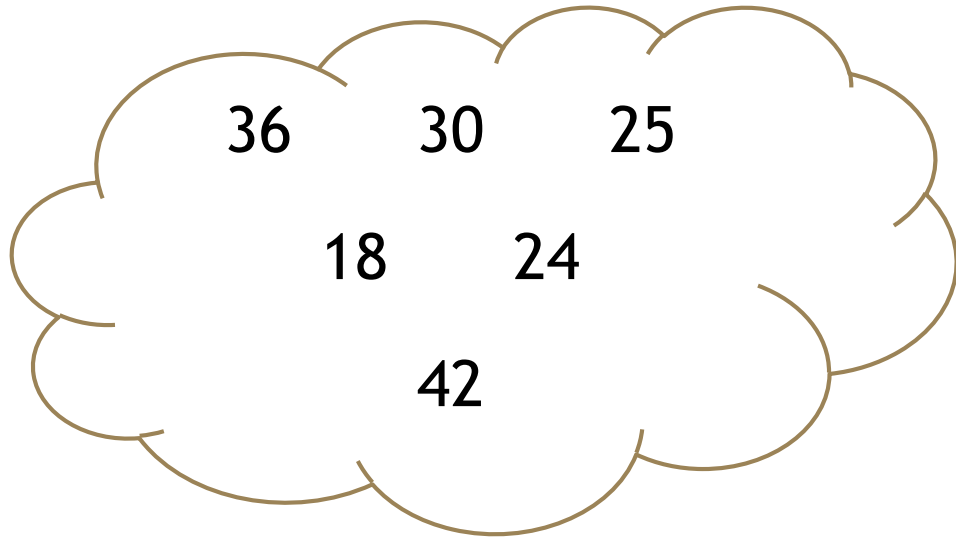


LO: Convert between
different units of
measurement

Recap

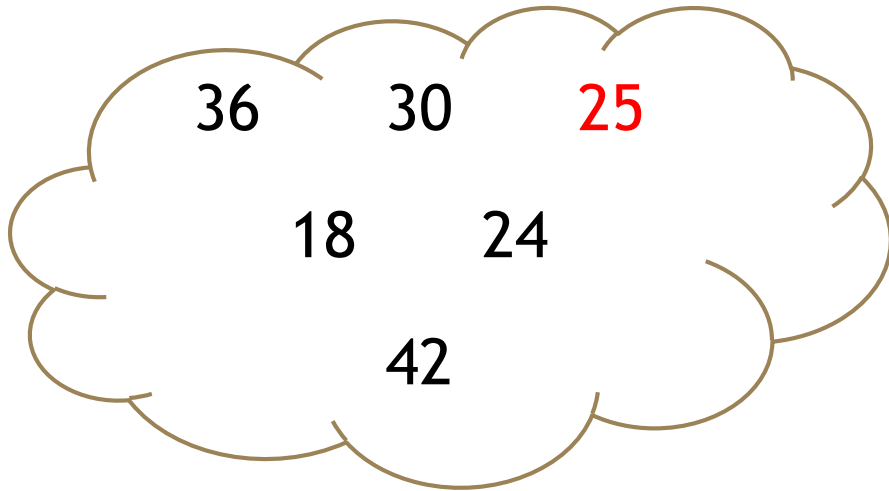
Find the number which does not have 6 as a factor then explain your choice.



Answer

Recap

Find the number which does not have 6 as a factor then explain your choice.



25 does not have 6 as a factor because 25 is an odd number and all the multiples of 6 are even. Also, when counting up in 6s, it goes up as 6, 12, 18, 24, 30 and so on. 25 does not appear in this list.

Recap

1) $96 \times 1,000$

2) $75 \div 10$

3) 182×100

4) 34.5×10

5) $1,998 \div 100$

Challenge: I think of a number. I multiply it by 100 and then divide it by 10. My answer is 968. What is my number?

Answer

Recap

1) $96 \times 1,000 = 96,000$

2) $75 / 10 = 7.5$

3) $182 \times 100 = 18,200$

4) $34.5 \times 10 = 345$

5) $1,998 / 100 = 19.98$

Challenge: I think of a number. I multiply it by 100 and then divide it by 10. My answer is 968. What is my number?

To find the answer, do the inverse of the given operations to the final number.

Step 1: $968 \times 10 = 9680$

Step 2: $9680 / 100 = 96.80$ – The number at the beginning

What is the metric system?

<https://www.bbc.com/bitesize/articles/zqf4cwx>

Click on the link above and watch the video about the metric system on BBC Bitesize.

The Metric system

- Measures → length, weight and volume.



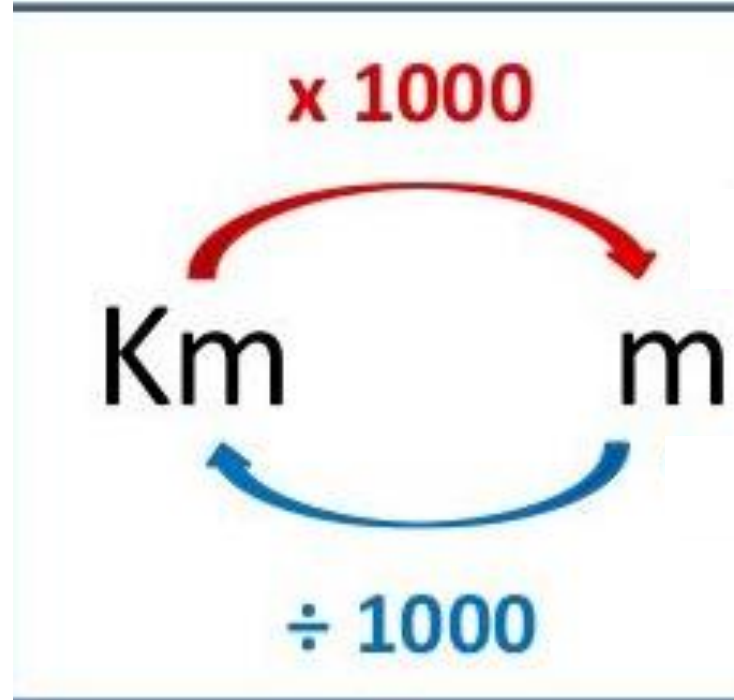
Metric units of measurement.

- Millimetres (mm)
- Centimetres (cm)
- Metres (m)
- Kilometres (km)
- Grams (g)
- Kilograms (kg)
- Millilitres (ml)
- Litres (l)

Converting metres (m) to kilometres (km)

$$1\text{km} = 1,000\text{m}$$

To convert metres (m) to kilometres (km), divide the given number by 1000



To convert kilometres (km) to metres (m), multiply the given number by 1000

Let's try some conversions

1. 2000m = km

2. 4km = m

3. 500m = km

4. 1500m = km

5. 4300m = km

6. 3.7km = m

Answer

Let's try some conversions

- i. 2000m $\underline{2000 / 1000} = \underline{2}$ km
- ii. 4km $\underline{4 \times 1000} = \underline{4000}$ m
- iii. 500m $\underline{500 / 1000} = \underline{0.5}$ km
- iv. 1500m $\underline{1500 / 1000} = \underline{1.5}$ km
- v. 4300m $\underline{4300 / 1000} = \underline{4.3}$ km
- vi. 3.7km $\underline{3.7 \times 1000} = \underline{3700}$ m

Let's try some more conversions

1) $3\text{km} = \underline{\hspace{2cm}}\text{m}$

2) $4,000\text{m} = \underline{\hspace{2cm}}\text{km}$

3) $75.3\text{m} = \underline{\hspace{2cm}}\text{km}$

4) $562.9\text{m} = \underline{\hspace{2cm}}\text{km}$

Answer

Let's try some conversions

1) $3\text{km} = \underline{3 \times 1000} = \underline{3000} \text{ m}$

2) $4,000\text{m} = \underline{4000 / 1000} = \underline{4} \text{ km}$

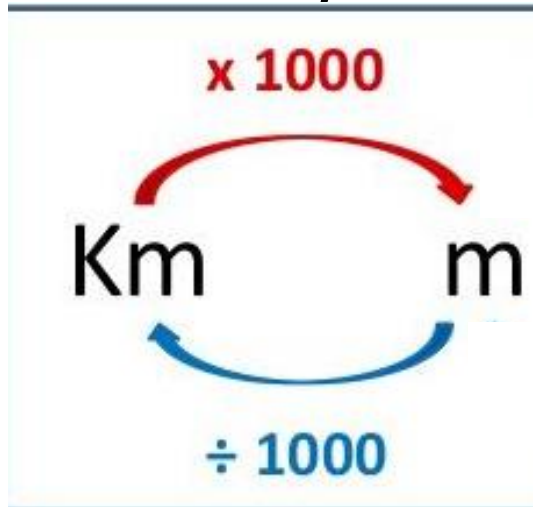
3) $75.3\text{m} = \underline{075.3 / 1000} = \underline{0.0753} \text{ km}$

4) $562.9\text{m} = \underline{562.9 / 1000} = \underline{0.5629} \text{ km}$

Task 1 – Use your knowledge of converting measurements to complete the following:

Fatima is planting a flowerbed in her garden. Her flowerbed will be 1.5 kilometres in length. She purchases enough flowers to cover 150 metres. Will she manage to cover her entire flowerbed? Use the information below to work this out.

$$1\text{ km} = 1,000\text{ m}$$



Task 2 – Use your knowledge of converting measurements to complete the following:

Match the following

1500m

300m

4km

2300m

0.3km

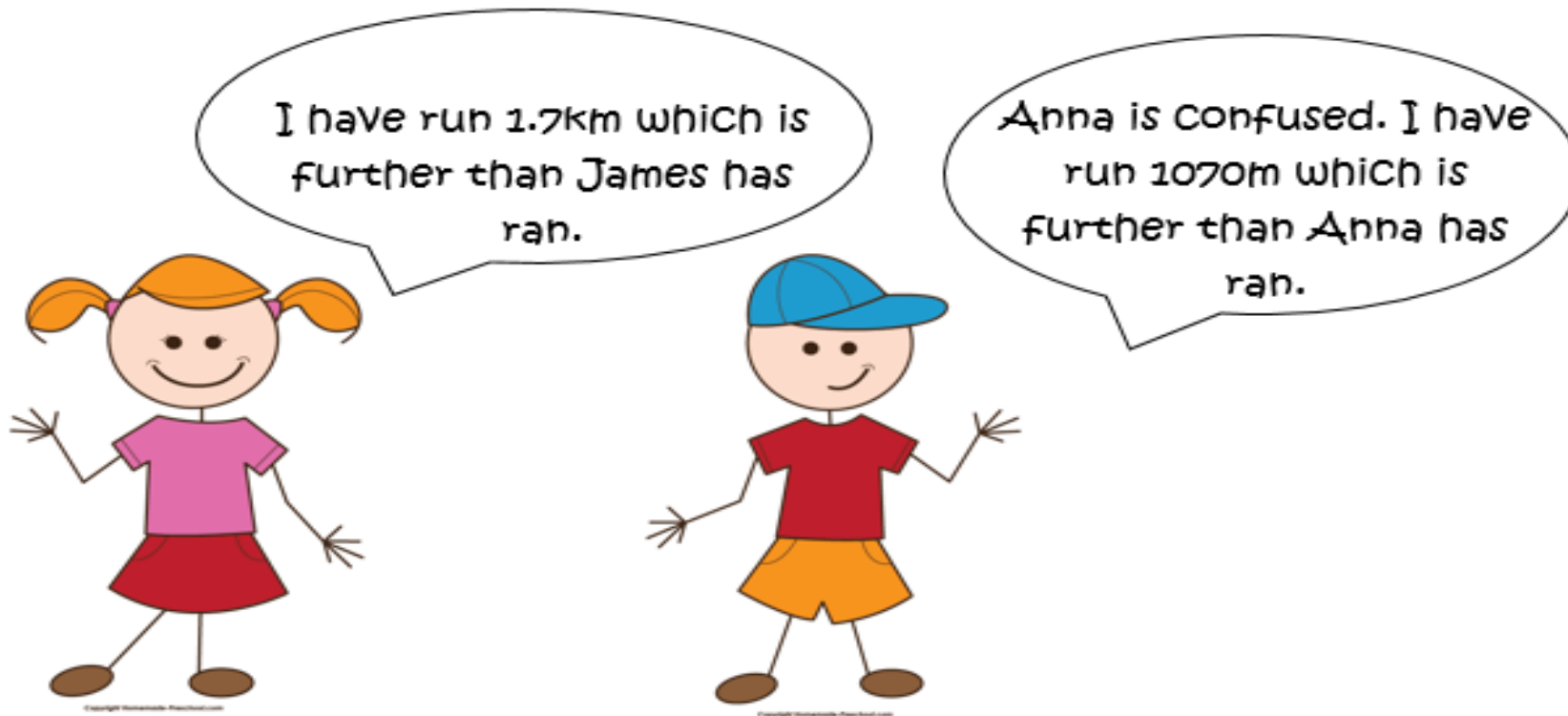
4000m

1.5km

2.3km

Task 3 – Use your knowledge of converting measurements to complete the following:

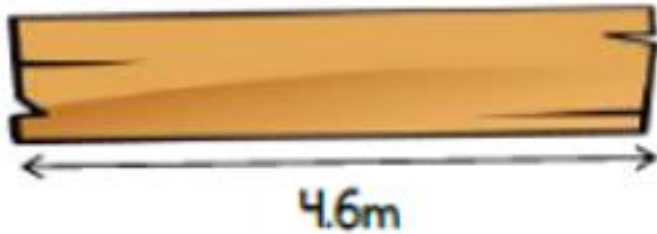
Anna and James are training for a school athletics competition.



Who is correct? Explain how you know.

Task 4 – Use your knowledge of converting measurements to complete the following:

- A plank of wood is 4.6m long.



Two lengths are cut from the wood.

350cm

$2\frac{1}{4}$ m

How much wood is left?

Task 5 – Use your knowledge of converting measurements to complete the following:

James and Sita do a sponsored walk for charity.

They walk 1.2km altogether.

James walks double the amount that Sita walks.

How far does Sita walk?

They each raise 75p for every 100m they walk.

How much money do they each make?

James _____ Sita _____