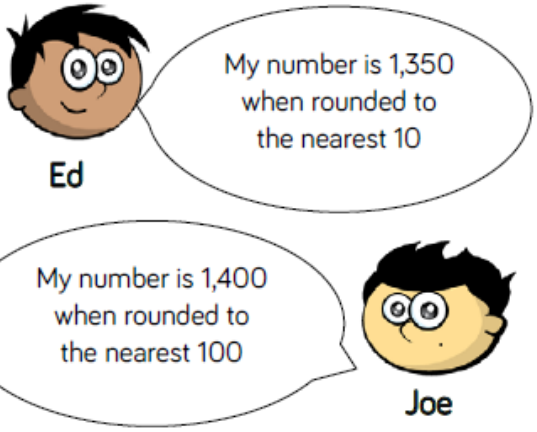
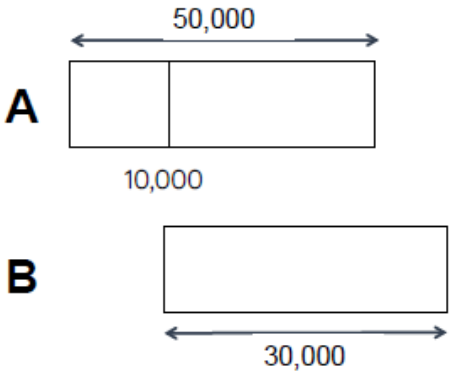
Year 6 reasoning examples



Both numbers are whole numbers.

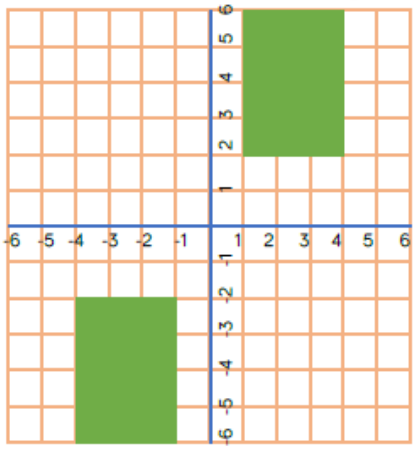
What is the greatest possible difference between the two numbers?

Kayleigh draws bar model A.
Her teacher asks her to draw another where the total is 30,000



Explain how you know bar B is inaccurate.

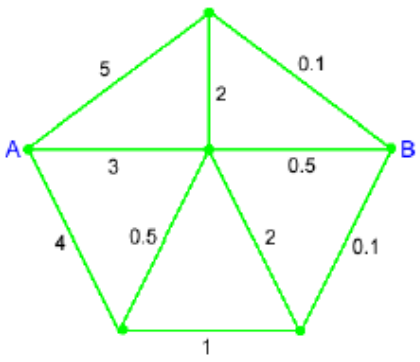
A rectangle has been reflected in the x axis and the y axis.
Where could the starting rectangle have been? Is there more than one option?



Always, sometimes, never?

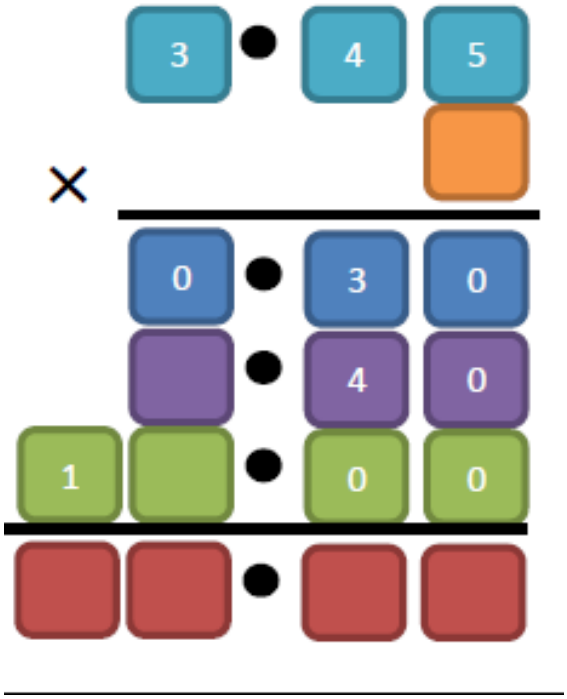
To simplify a fraction you divide by 2 until you can't divide by 2 anymore.

- You need to travel from Point A to Point B. You can only travel through each point once.



What is the largest product you can make from A to B?
What is the smallest product you can make from A to B?

- Fill in the empty boxes

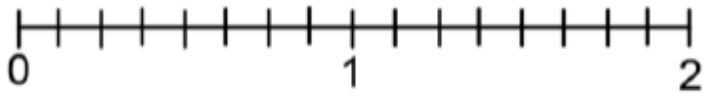


- **True or False?**

When you multiply a number with 2 decimal places by a whole number, the answer always has more than 2 decimal places.

Prove it.

How many ways can you show a difference of one quarter on the number line?



Write different number sentences using the digits 2, 3, 5 and 8 before the equals sign, using:

- one operation
- two operations but no brackets
- two operations and brackets.

Can you write a number sentence using the digits 2, 3, 5 and 8 before the equals sign, which has the same answer as another number sentence using the digits 2, 3, 5 and 8 but which is a different sentence?