

Route Product by Lucy

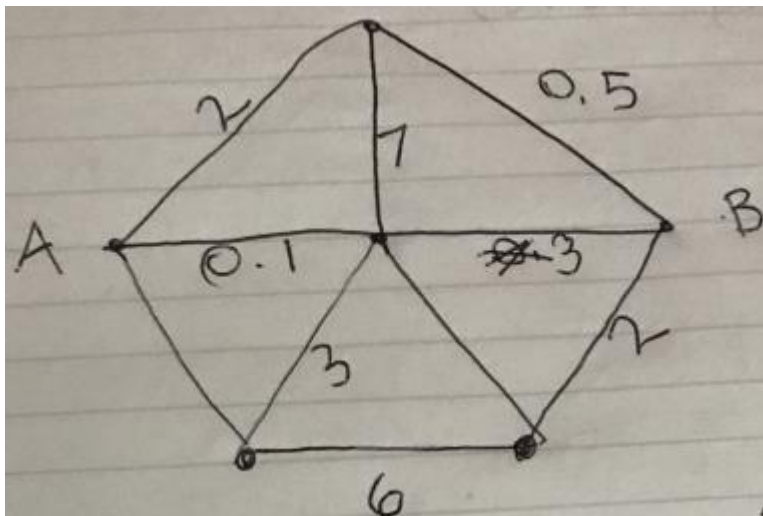
Remember

Product means the result of multiplying.

$0.5 \times 4 = 2$ (It's the same as $\frac{1}{2} \times 4$ or $\frac{1}{2}$ of 4)

$0.1 \times 6 = 0.6$ (It's the same as $\frac{1}{10} \times 6$ or $\frac{1}{10}$ of 6)

There are lots of different routes from A to B in this diagram:



The idea is to work out the product of the numbers on these different routes from A to B . In a route you are **not** allowed to visit a point more than once.

For example, we could have 0.1×3 but we couldn't have $2 \times 7 \times 0.1 \times 2 \times 0.5$ because that route passes through A twice.

How many possible routes are there?
What is the largest product?
What is the smallest route?
Which route has the product of 504?