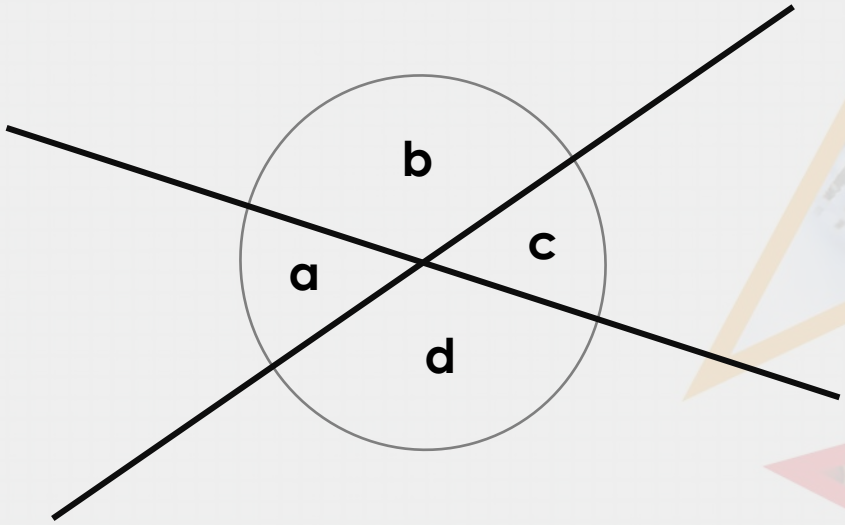
Part 3 - Reasoning

WALT: Calculate Vertically Opposite Angles

Problem Solving 1

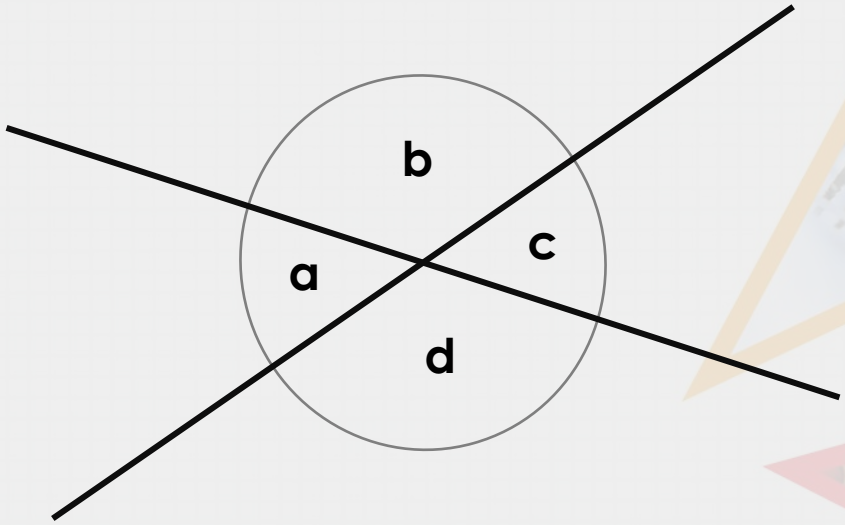
If angle b measures 124°, what is the size of angle c?



Not drawn to scale.

Problem Solving 1

If angle b measures 124°, what is the size of angle c?

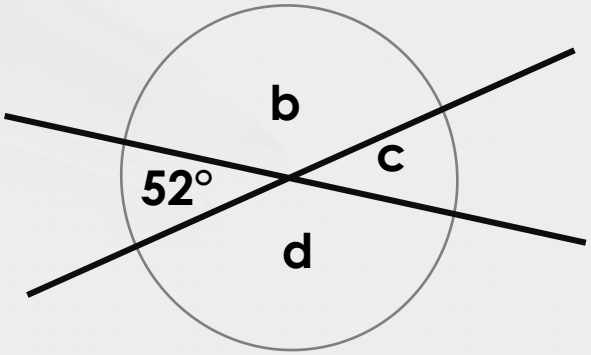


Angle c is 56°

Not drawn to scale.

Reasoning 1

Sue says:



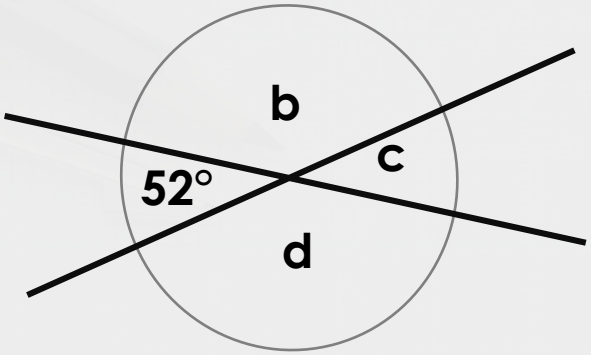
I think that angle d measures 154°.

Is Sue correct? Explain why.

Not drawn to scale.

Reasoning 1

Sue says:



I think that angle d measures 154°.

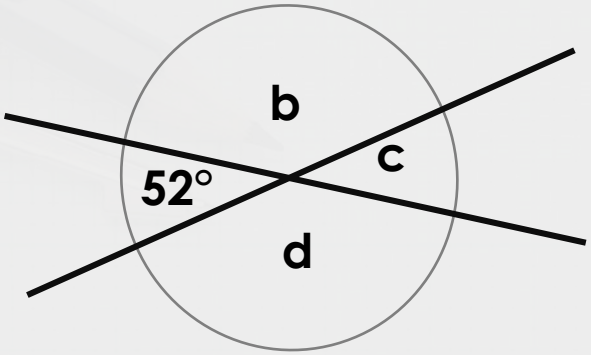
Is Sue correct? Explain why.

Sue is not correct as this would mean that all 4 angles total...

Not drawn to scale.

Reasoning 1

Sue says:



I think that angle d measures 154°.

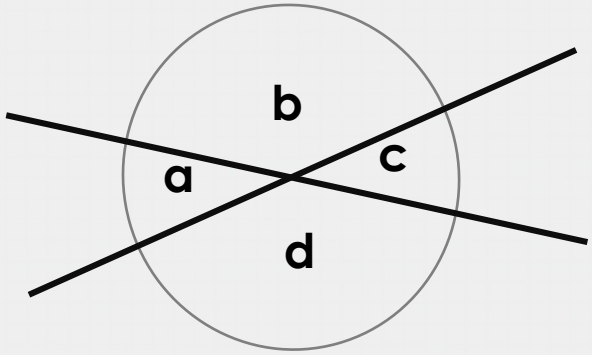
Is Sue correct? Explain why.

Sue is not correct as this would mean that all 4 angles total 412°. Sue has forgotten that she needs to subtract 2 lots of 52° from 360°, before dividing her answer by 2 to find the angle d, which is 128°.

Not drawn to scale.

Reasoning 2

Knowing that angle a measures 36°, identify whether these statements are true or false:



a. Angles a and d total 180°.

c. Angles a, b and c total 214°.

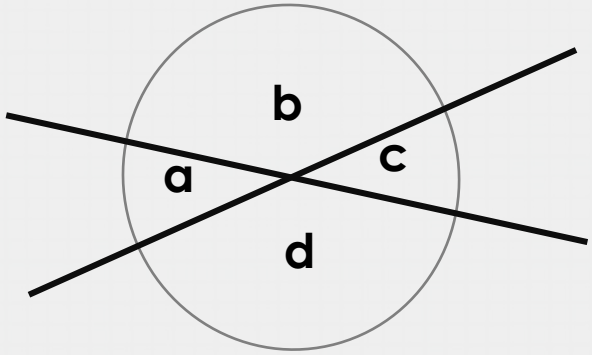
b. Angle d and b total 288°.

d. Angles a and c total 180°.

Not drawn to scale.

Reasoning 2

Knowing that angle a measures 36°, identify whether these statements are true or false:



a. Angles a and d total 180°.
True

c. Angles a, b and c total 214°.
False, it is 216°

b. Angle d and b total 288°.
True

d. Angles a and c total 180°.
False, it is 72°

Not drawn to scale.

Well done! It's over to you now.

Go to Part 4 and choose your Star Challenge! Normal rules apply: page 1 will give you an easier challenge, page 2 will be about the same as what we've just practised and page 3 will be more of a stretch.

You only need to do the first set of questions on your chosen Star Challenge – the 'A' questions. If you want extra practice, you can then do the next set of questions – the 'B' questions. When you finish, don't forget to mark your answers before sharing, so I can see where you need help.