

Name: _____

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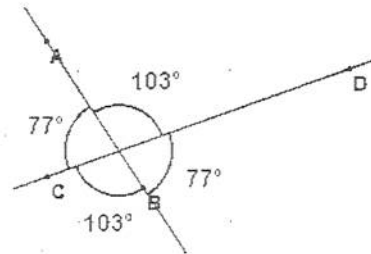
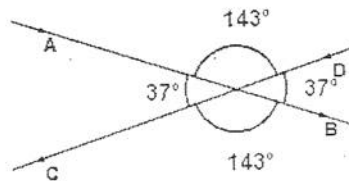
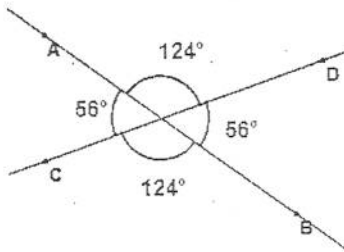
Vertical Angles

John and Stewart are two students in a daily geometry class. Today in class, they learned that vertical angles are always congruent. However, John and Stewart are unsure why this is the case, so they did some investigating.

John and Stewart each came up with a different reason why vertical angles are congruent. Your job is to figure out how they could improve their arguments, and to decide who did a better job. You will use this information to construct your own argument as well.

John's Argument

I know vertical angles are always congruent because I measured 3 sets of angles and the vertical angles were the same every time.



What do you like about John's argument?

What could John have done better?

Stewart's Argument

VERTICAL ANGLES HAVE TO BE
CONGRUENT BECAUSE THEY ARE
SUPPLEMENTARY TO THE SAME
ANGLE.

What do you like about Stewart's argument?

What could Stewart have done better?

Which argument did you think was better?

Write your own argument to prove why vertical angles are always congruent.
