Angles in parallel lines with one transversal

Maths
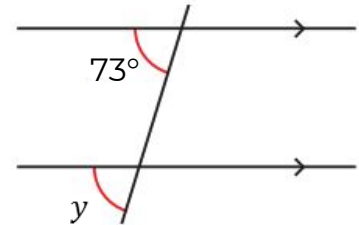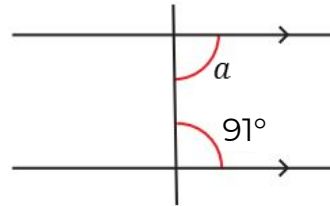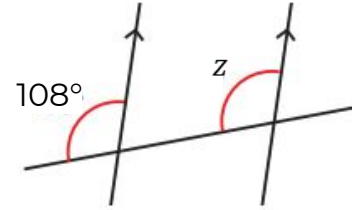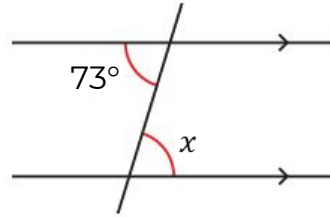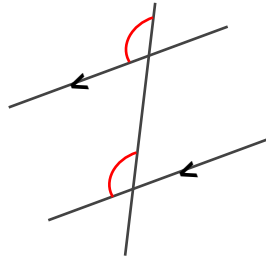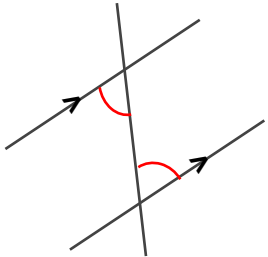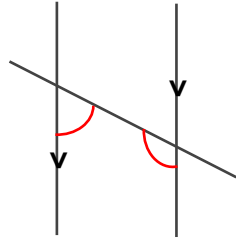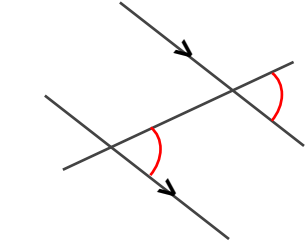
Mr Clasper

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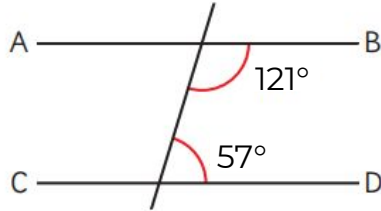
1. State whether each pair of angles are alternate, corresponding or co-interior.

2. Find the missing marked angles. Write down a reason for each.
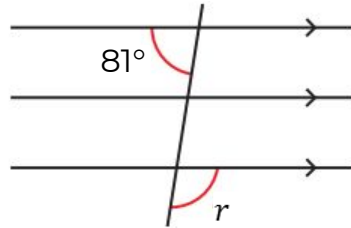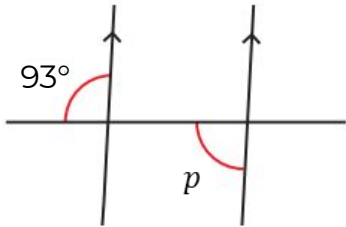
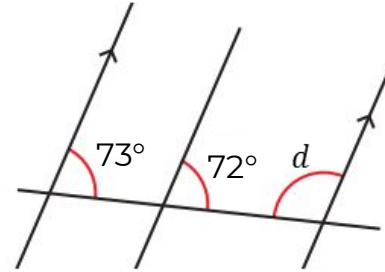# Angles in parallel lines with one transversal

3. Are the two lines segments AB and CD parallel? Explain your reasoning.

4. Work out the missing angles. Give reasons for your answers.

5. Mo thinks that angle d is 108° because 72° + 108° is equal to 180°.
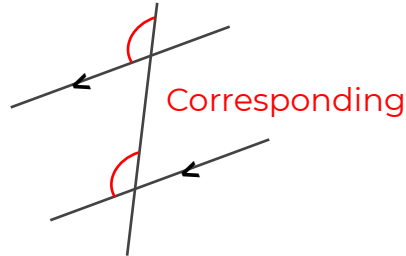

Is Mo correct? Explain your answer.

Answers

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1. State whether each pair of angles are alternate, corresponding or co-interior.

Co-interior

Corresponding

Alternate

Corresponding

2. Find the missing marked angles. Write down a reason for each.

73°

x

$x = 73°$. Alternate

108°

z

$z = 108°$. Corresponding

a

91°

$a = 89°$. Co-interior

73°

y

$y = 73°$. Corresponding

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3. Are the two lines segments AB and CD parallel? Explain your reasoning.

No. If they were parallel then the co-interior angles would have a sum of 180°

4. Work out the missing angles. Give reasons for your answers.

5. Mo thinks that angle d is 108° because 72° + 108° is equal to 180°.
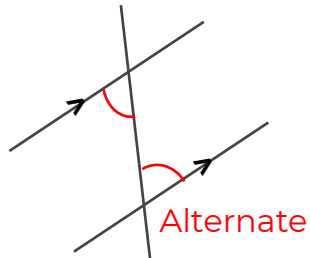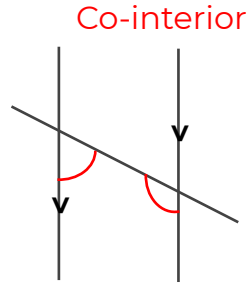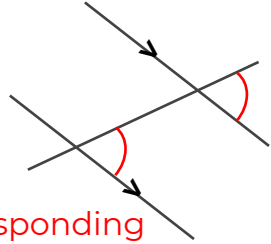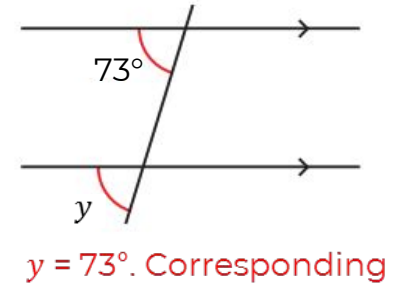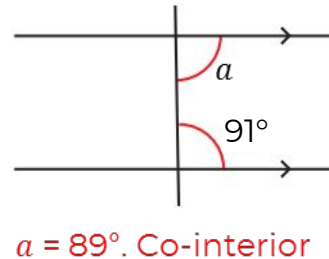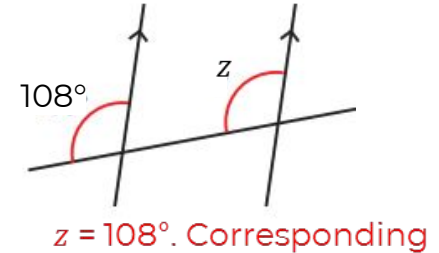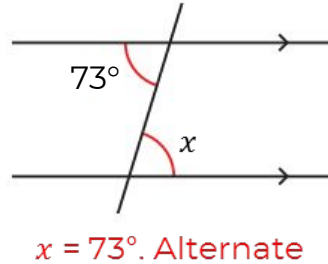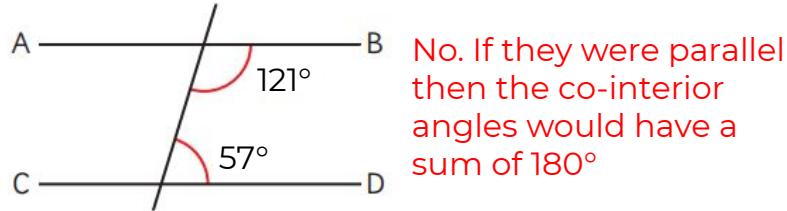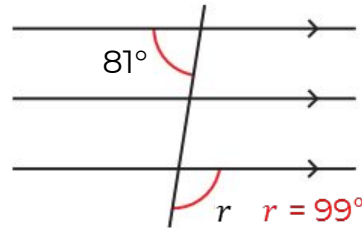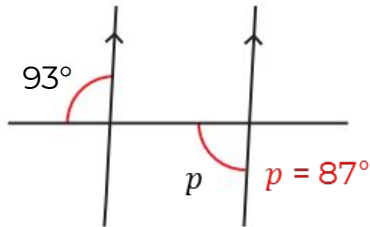

Is Mo correct? Explain your answer.

No.
The 73° angle and d are co-interior as these touch each parallel line
There are only two parallel lines, not three