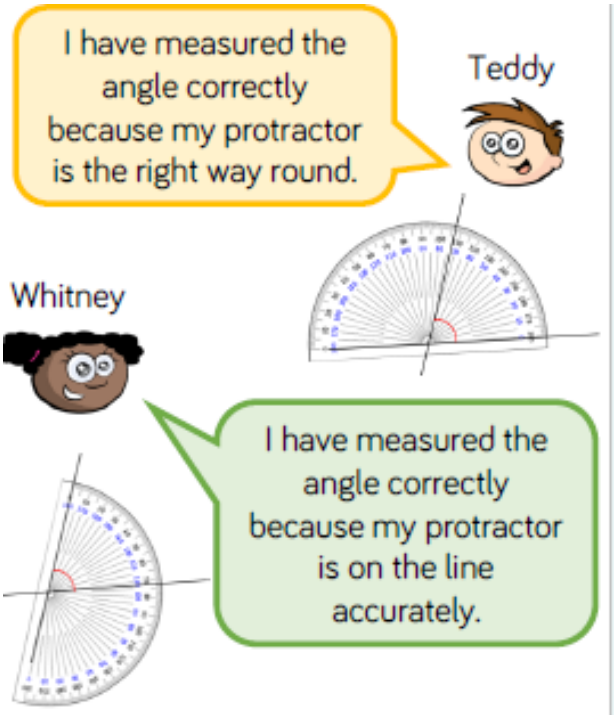
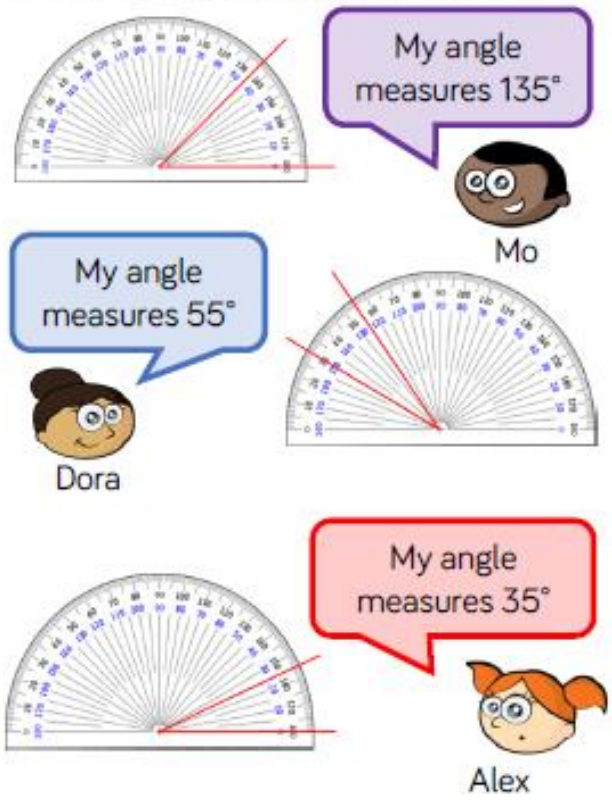
Measuring with a protractor (Monday)

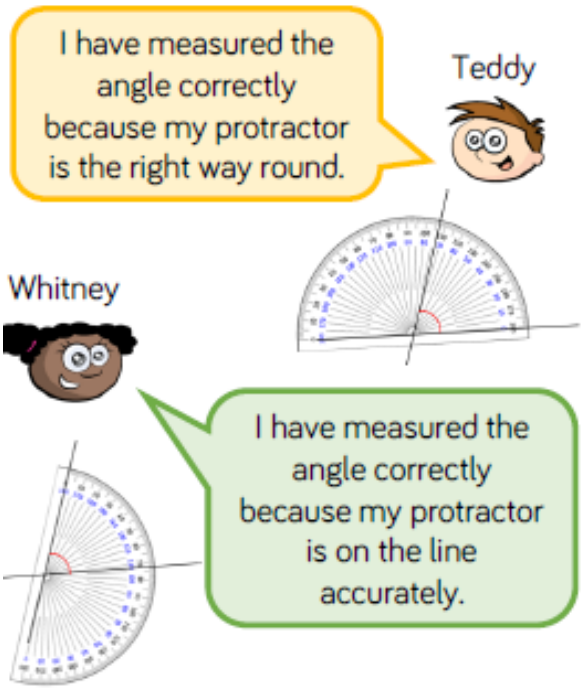


Who do you agree with?
Explain why.

Three children are measuring angles. Can you spot and explain their mistake?



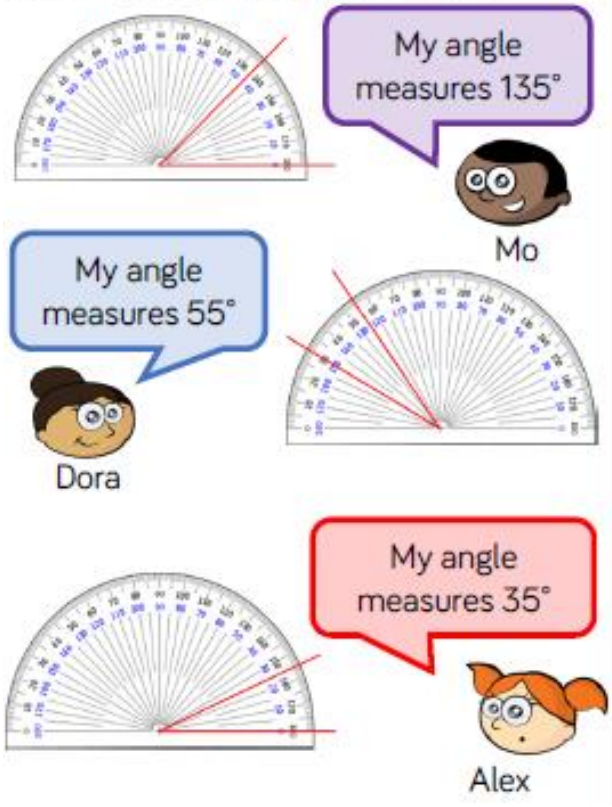
Measuring with a protractor ANSWERS



Who do you agree with?
Explain why.

They are both correct. It doesn't matter which way the protractor is as long as it is placed on the angle correctly.

Three children are measuring angles. Can you spot and explain their mistake?



Mo hasn't recognised his angle is acute, so his measurement is wrong.

Alex has not placed one of her lines on 0. Her angle measures 25°.

Dora has misread the scale. Her angle measures 25°.

Drawing lines and angles accurately (Tuesday)

Draw a range of angles for a friend.
Estimate the sizes of the angles to order them from smallest to largest.
Measure the angles to see how close you were.

Always, sometimes or never true?

- Two acute angles next to each other make an obtuse angle.
- Half an obtuse angle is an acute angle.
- 180° is an obtuse angle

Drawing lines and angles accurately ANSWERS

Draw a range of angles for a friend.
Estimate the sizes of the angles to order them from smallest to largest.
Measure the angles to see how close you were.

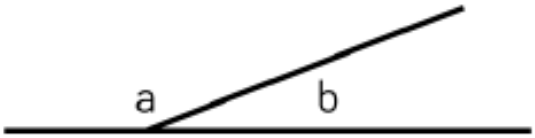
Always, sometimes or never true?

- Two acute angles next to each other make an obtuse angle.
- Half an obtuse angle is an acute angle.
- 180° is an obtuse angle

- Sometimes
- Always
- Never

Calculate angles on a straight line (Wednesday)

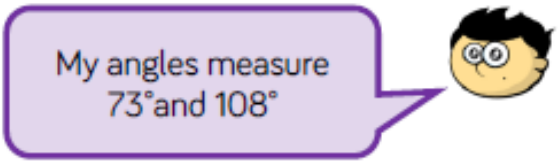
Here are two angles.



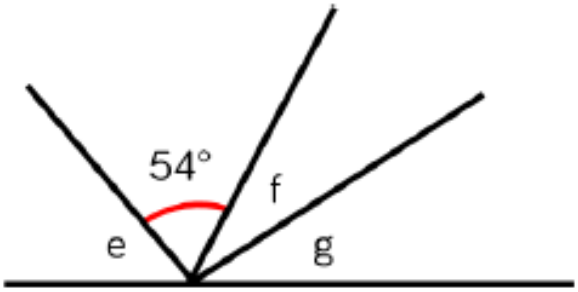
Angle b is a prime number between 40 and 50

Use the clue to calculate what the missing angles could be.

Jack is measuring two angles on a straight line.



Explain why at least one of Jack's angles must be wrong.



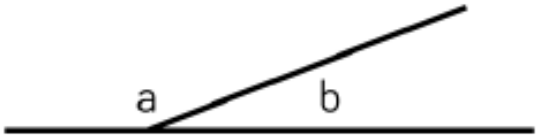
- The total of angle f and g are the same as angle e
- Angle e is 9° more than the size of the given angle.
- Angle f is 11° more than angle g

Calculate the size of the angles.

Create your own straight line problem like this one for your partner.

Calculate angles on a straight line ANSWERS

Here are two angles.



Angle b is a prime number between 40 and 50

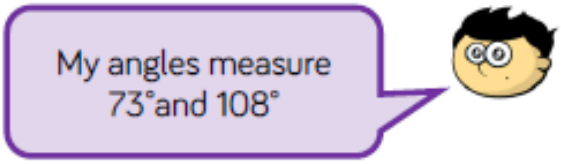
Use the clue to calculate what the missing angles could be.

b = 41°, a = 139°

b = 43°, a = 137°

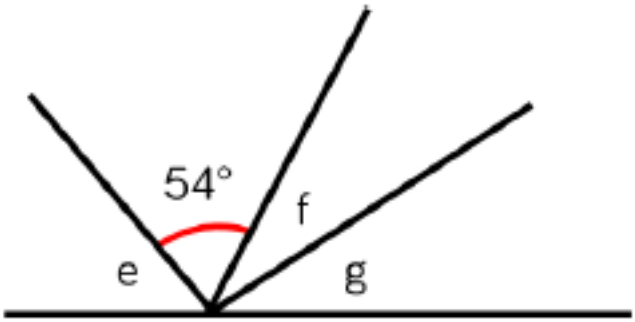
b = 47°, a = 133°

Jack is measuring two angles on a straight line.



Explain why at least one of Jack's angles must be wrong.

His angles total more than 180°.



- The total of angle f and g are the same as angle e
- Angle e is 9° more than the size of the given angle.
- Angle f is 11° more than angle g

Calculate the size of the angles.

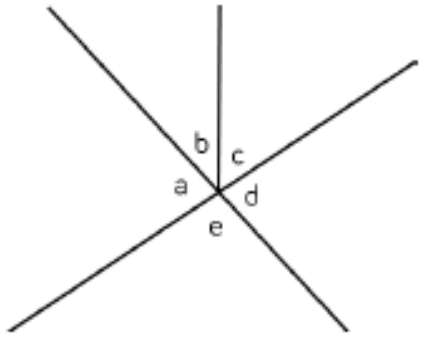
Create your own straight line problem like this one for your partner.

e = 63°

f = 37°

g = 26 °

Calculate angles around a point (Thursday)



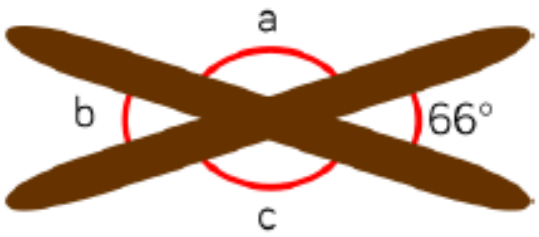
$a + b + c + d + e = 360°$

$d + e = 180°$

Write other sentences about this picture.

Two sticks are on a table.

Without measuring, find the three missing angles.

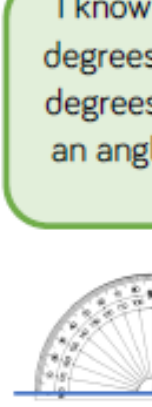


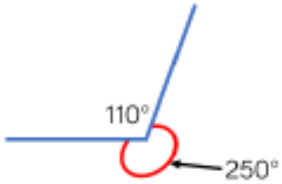
Eva says,

My protractor only goes to 180 degrees, so I can't draw reflex angles like 250 degrees.

Rosie says,

I know a full turn is 360 degrees so I can draw 110 degrees instead and have an angle of 250 degrees as well.

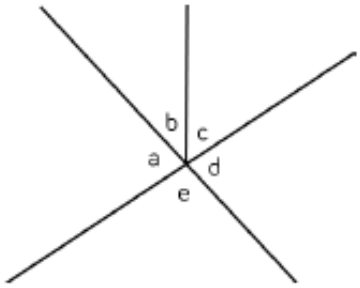




Use Rosie's method to draw angles of:

- 300°
- 200°
- 280°

Calculate angles around a point ANSWERS



$a + b + c + d + e = 360°$
$d + e = 180°$
Write other sentences about this picture.

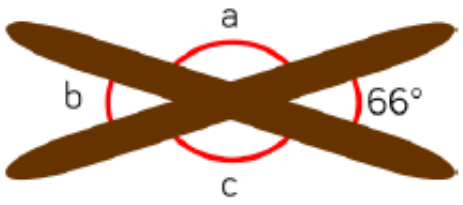
Various answers e.g.

$a + b + c = e + d$

$360° - e - d = 180°$

etc.

Two sticks are on a table.
Without measuring, find the three missing angles.



$a = 114°$

$b = 66°$

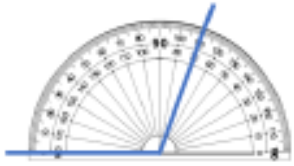
$c = 114°$

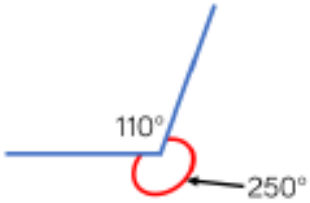
Eva says,

My protractor only goes to 180 degrees, so I can't draw reflex angles like 250 degrees.

Rosie says,

I know a full turn is 360 degrees so I can draw 110 degrees instead and have an angle of 250 degrees as well.





Use Rosie's method to draw angles of:

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