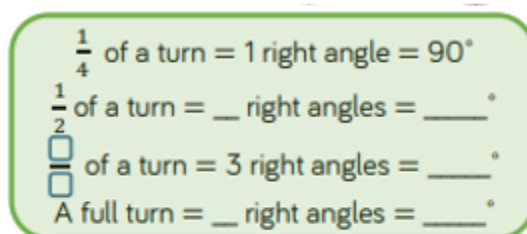


16.06.21LO: to calculate vertically opposite anglesStarter

$\frac{1}{4}$ of a turn = 1 right angle = 90°
 $\frac{1}{2}$ of a turn = __ right angles = ____°
 $\frac{3}{4}$ of a turn = 3 right angles = ____°
A full turn = __ right angles = ____°

I
do

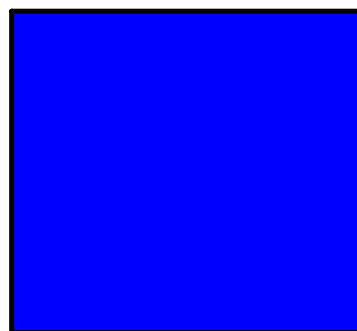
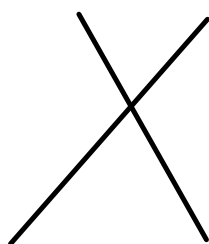
Angles in a full turn add up to 360° .

To calculate a missing angle in a full turn,
take away the known angles from 360° .

I
dowe
doVertically opposite angles

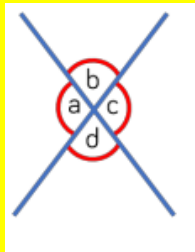
What do I mean by vertically opposite
angles?

Any ideas?



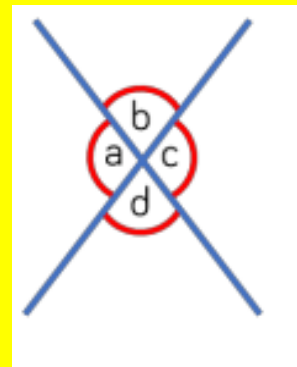
we
do

- On a piece of paper draw a large x
- mark on your angles as shown



we
do

- using your protractor, measure all the angles
- what do you notice about b and d?
- what do you notice about a and c?

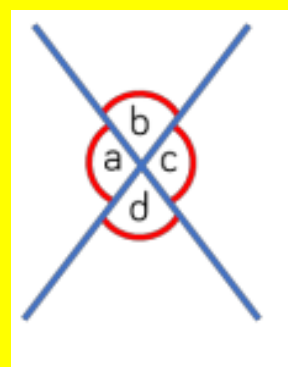
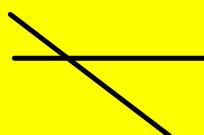
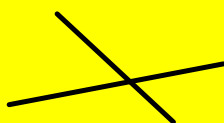
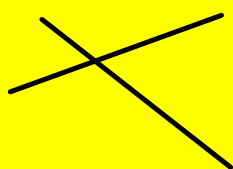


we
do

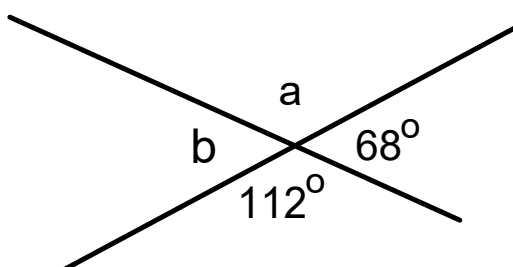
- is this always the case?

- try other examples

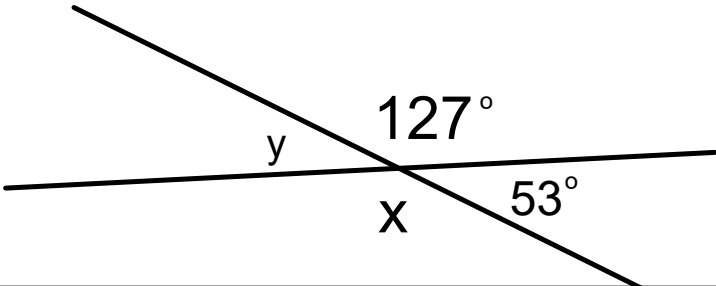
what do you notice?



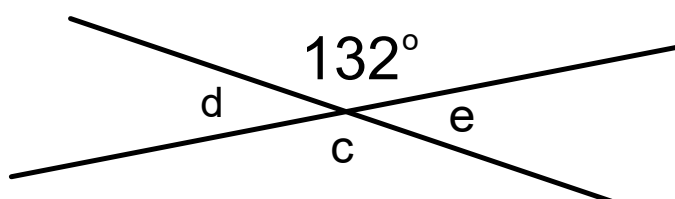
I
do



we
do

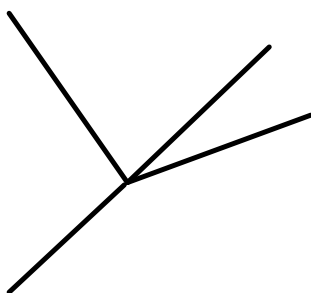


we
do



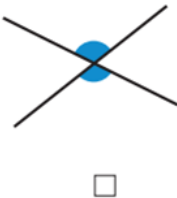
How can we work this one out? Discuss

Do we have vertically opposite angles in this diagram?



you
do

Tick the pairs of angles that are vertically opposite.



you
do

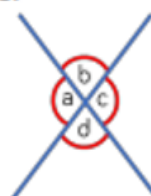
Use the letters from the diagram to fill in the boxes.

$\square = \square$

$\square = \square$

$\square + \square = 180^\circ$

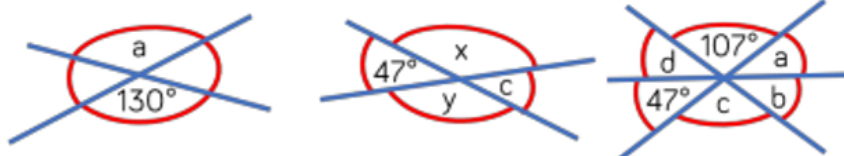
$\square + \square = 180^\circ$



Using the letters, write a calculation for 360°

you
do

Find the size of the missing angles.



you
do

Work out the unknown angles.

