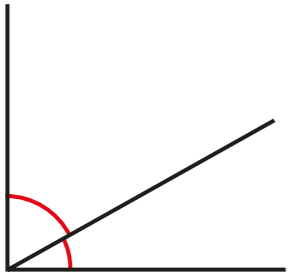
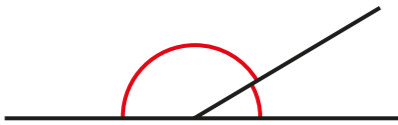
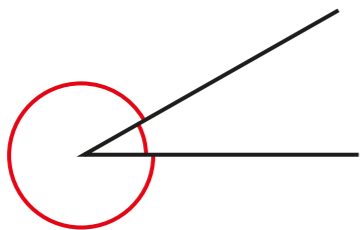


Calculate angles

1 What is the sum of the angles shown in each diagram?
Circle your answer and give a reason.

a)  **90°** **180°** **360°**

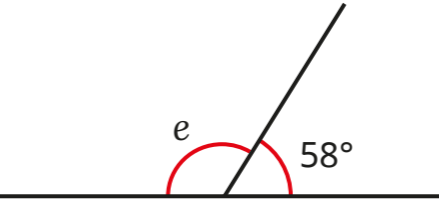
b)  **90°** **180°** **360°**

c)  **90°** **180°** **360°**

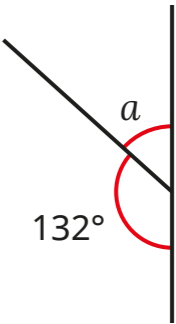
2 Work out the size of angle a .

 $a =$ °

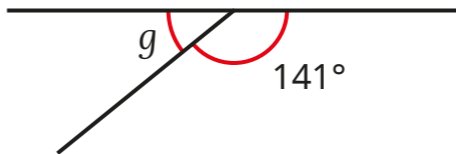
3 Work out the sizes of the unknown angles.

a) 

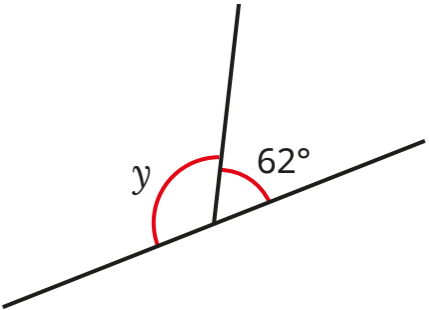
$e =$ °

d) 

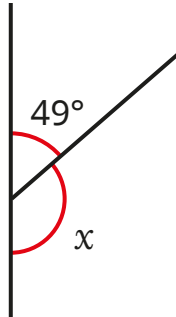
$a =$ °

b) 

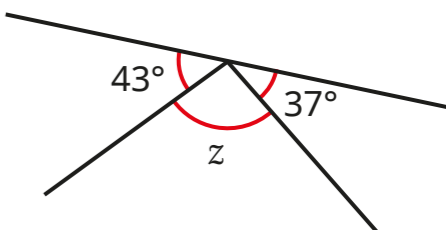
$g =$ °

e) 

$y =$ °

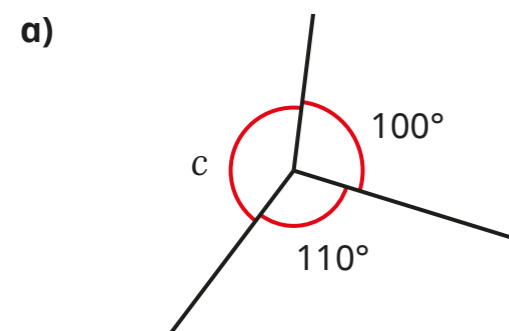
c) 

$x =$ °

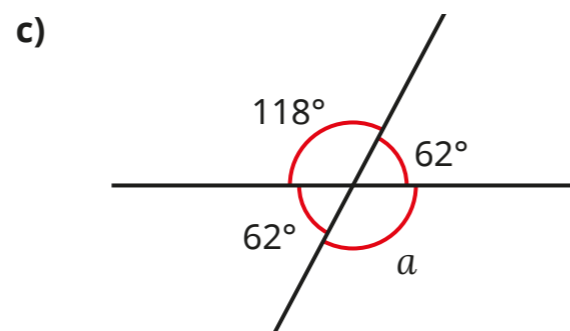
f) 

$z =$ °

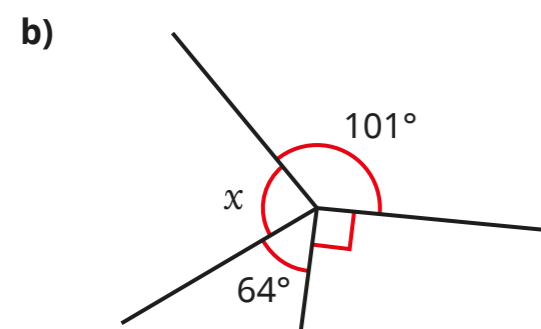
4 Work out the sizes of the unknown angles.



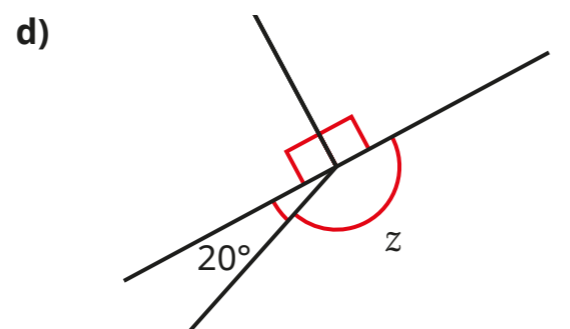
$c = \boxed{}^\circ$



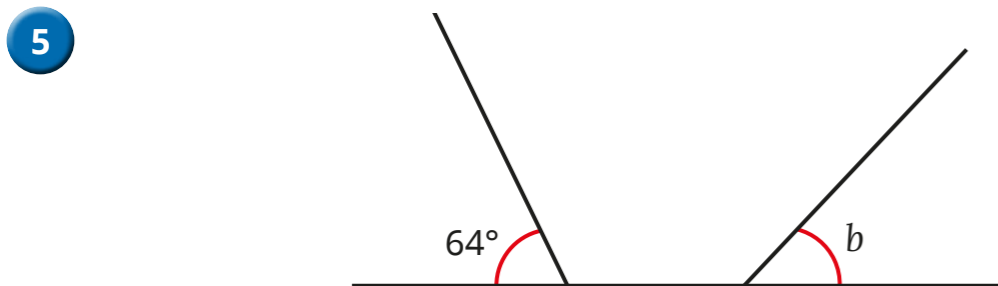
$a = \boxed{}^\circ$



$x = \boxed{}^\circ$



$z = \boxed{}^\circ$

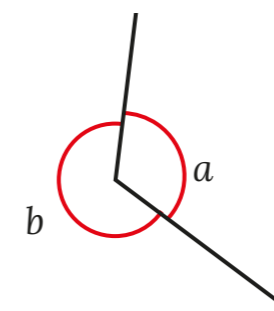


Angle b is 116° because angles on a straight line add up to 180° .

Do you agree with Tiny? _____
Explain your answer.

6 Use the information to work out the sizes of the unknown angles.

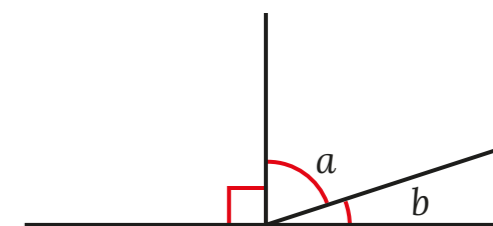
a) Angle a is half the size of angle b .



$a = \boxed{}^\circ$

$b = \boxed{}^\circ$

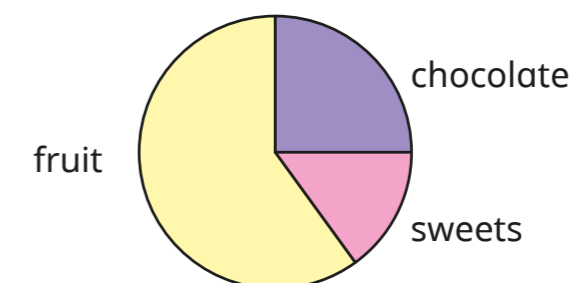
b) Angle a is four times the size of angle b .



$a = \boxed{}^\circ$

$b = \boxed{}^\circ$

7 The pie chart shows some children's favourite snacks.



- A quarter of the children said chocolate was their favourite snack.
- Five times as many children voted for fruit as voted for sweets.

Work out the size of the angle for each sector in the pie chart.

chocolate $\boxed{}^\circ$

sweets $\boxed{}^\circ$

fruit $\boxed{}^\circ$