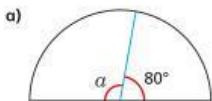
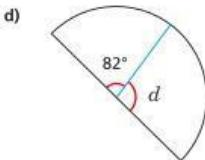


Calculating angles on a straight line

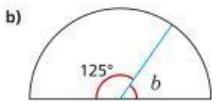
1 Work out the sizes of the unknown angles.



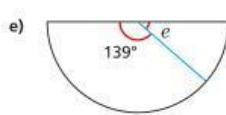
$$a = \boxed{}^\circ$$



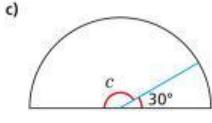
$$d = \boxed{}^\circ$$



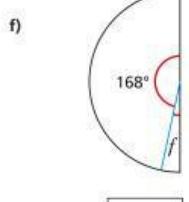
$$b = \boxed{}^\circ$$



$$e = \boxed{}^\circ$$



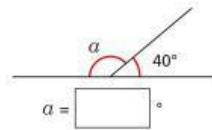
$$c = \boxed{}^\circ$$



$$f = \boxed{}^\circ$$

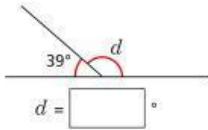
2 Work out the size of the unknown angles.

a)



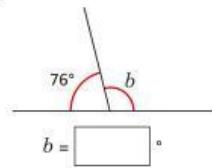
$$a = \boxed{}^\circ$$

d)



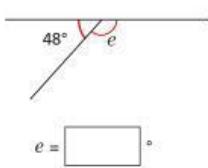
$$d = \boxed{}^\circ$$

b)



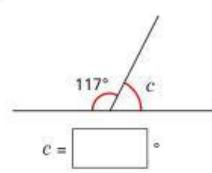
$$b = \boxed{}^\circ$$

e)



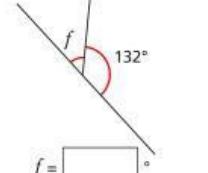
$$e = \boxed{}^\circ$$

c)



$$c = \boxed{}^\circ$$

f)



$$f = \boxed{}^\circ$$

3 Dora draws two angles.



AB is a straight line.

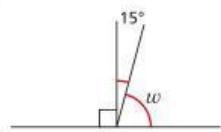
Do you agree with Dora? _____

Explain your answer.

4 Work out the size of the unknown angles.

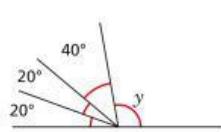
Show the steps in your working.

a)



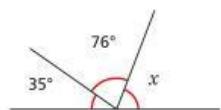
$$w = \boxed{\quad}^\circ$$

c)



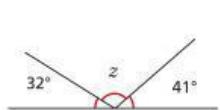
$$y = \boxed{\quad}^\circ$$

b)



$$x = \boxed{\quad}^\circ$$

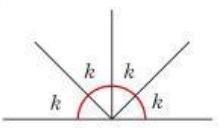
d)



$$z = \boxed{\quad}^\circ$$

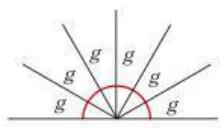
5 Work out the sizes of the unknown angles.

a)



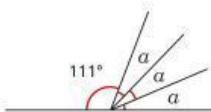
$$k = \boxed{\quad}^\circ$$

b)



$$g = \boxed{\quad}^\circ$$

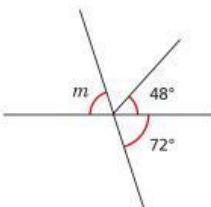
6 Work out the size of angle a .



$$a = \boxed{\quad}^\circ$$

7 Work out the size of angle m .

Show all your working out.



$$m = \boxed{\quad}^\circ$$

8 Two angles are marked.

Angle b is eight times the size of angle a .

What is the size of each angle?

$$a = \boxed{\quad}^\circ \quad b = \boxed{\quad}^\circ$$