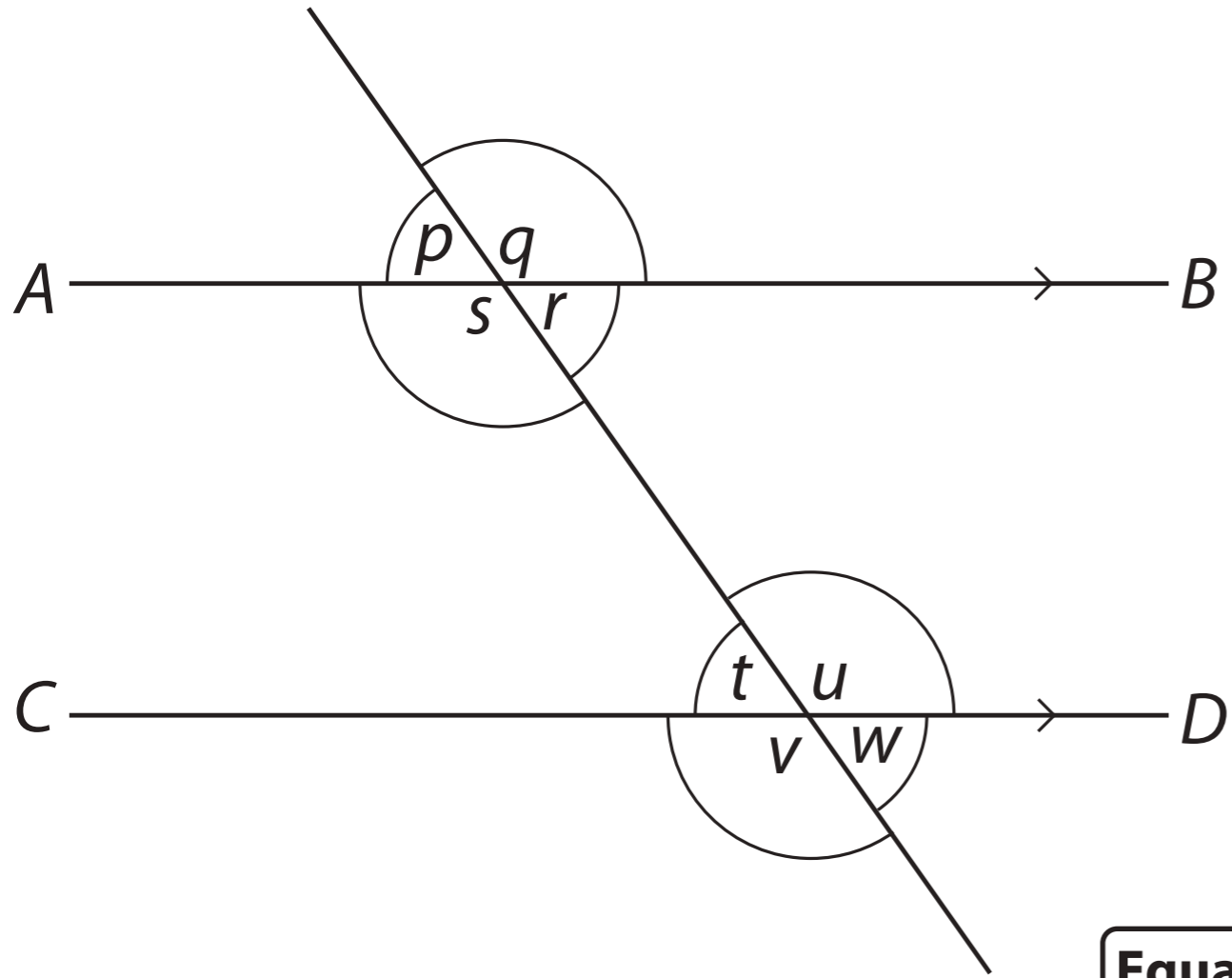
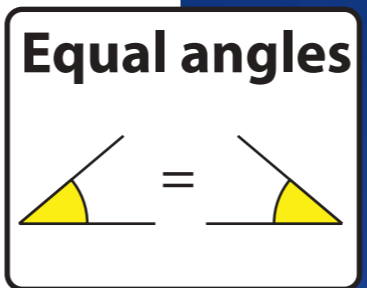


**f1** Look at the diagram.



Write down angles that are equal.



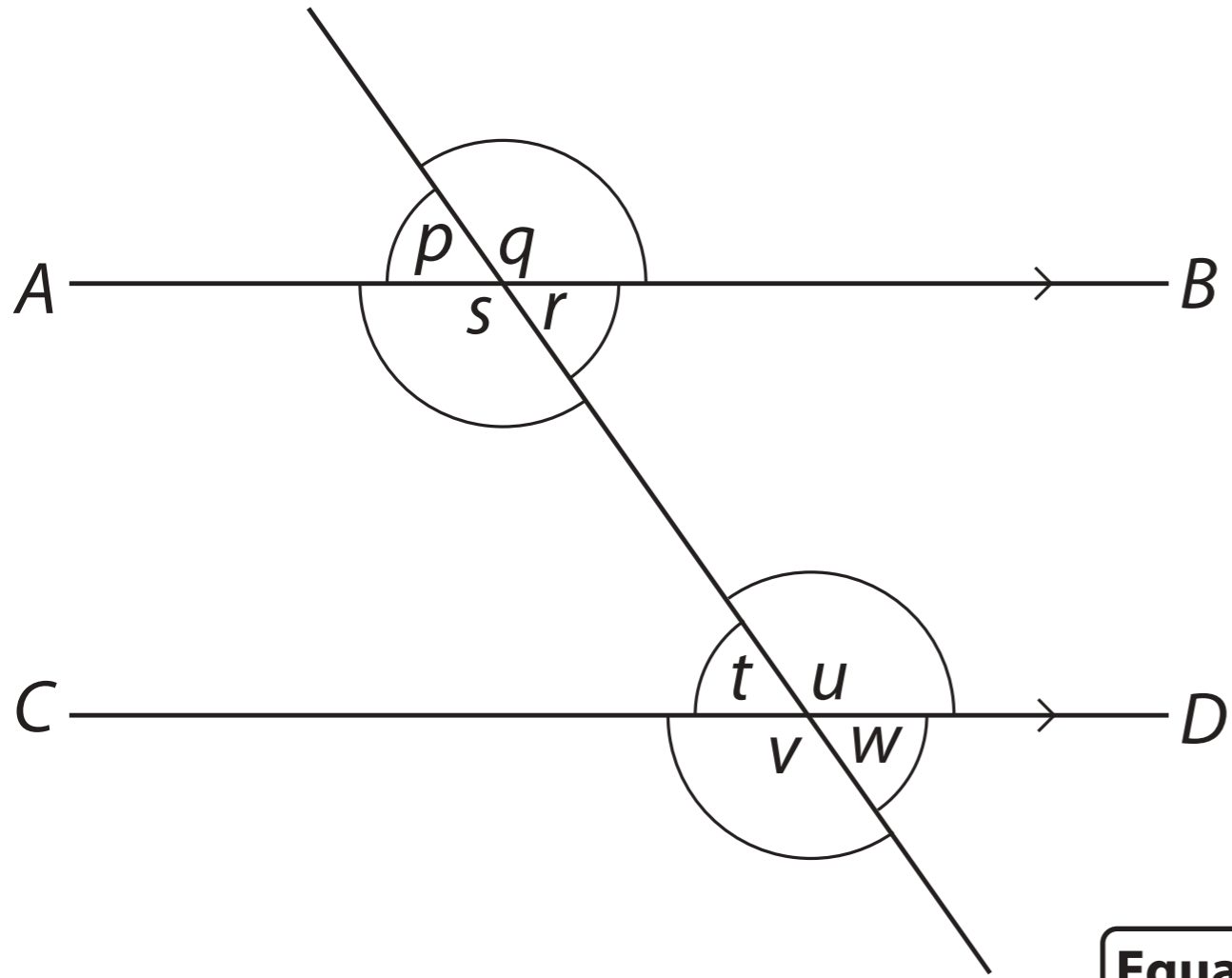
$$p = \square = \square = \square$$

and

$$q = \square = \square = \square$$



**f1** Look at the diagram.



Write down angles that are equal.

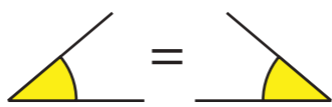
**Answer**

$$p = r = t = w$$

and

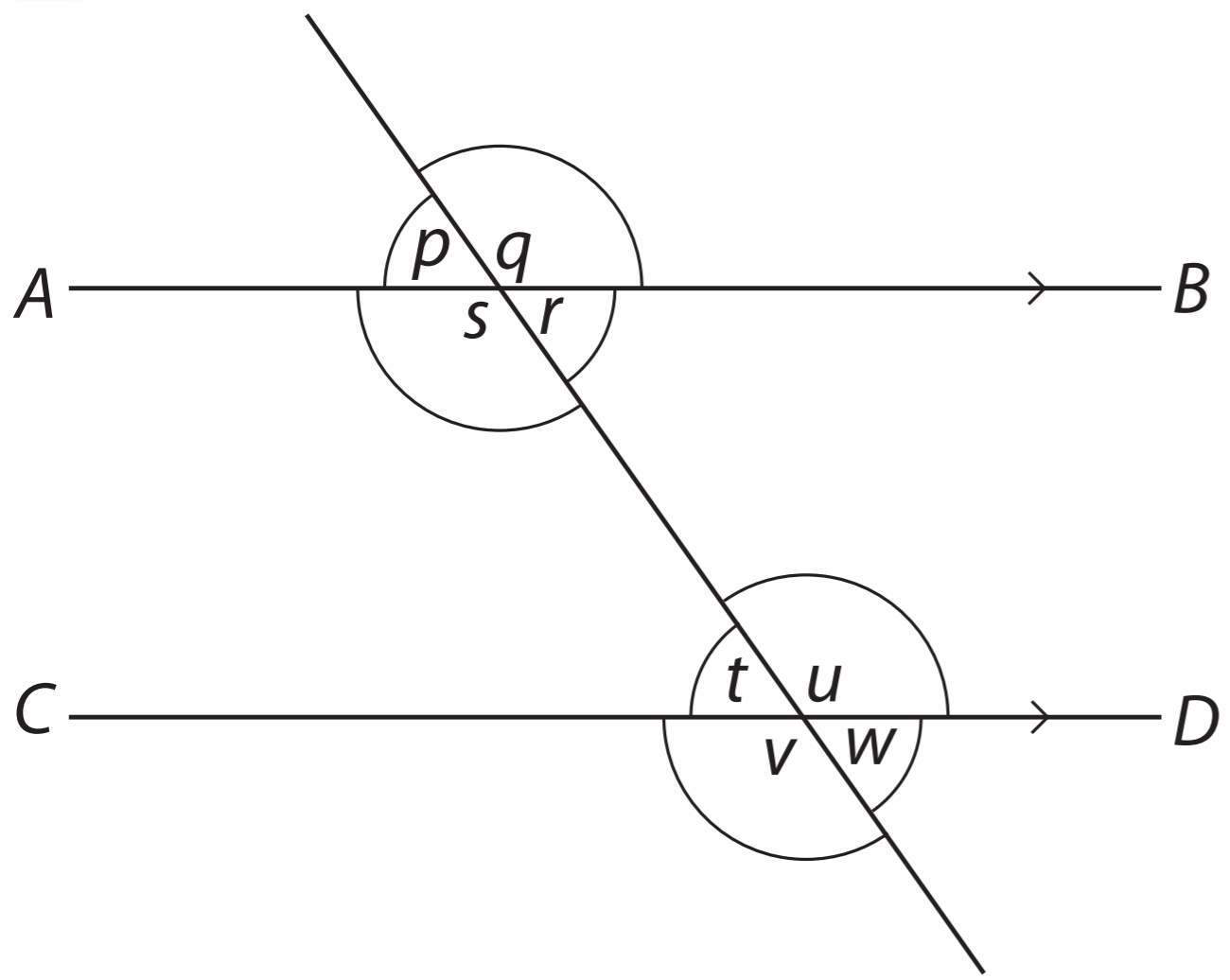
$$q = s = u = v$$

**Equal angles**



f2

Give examples of angles matching the descriptions.



**Corresponding**

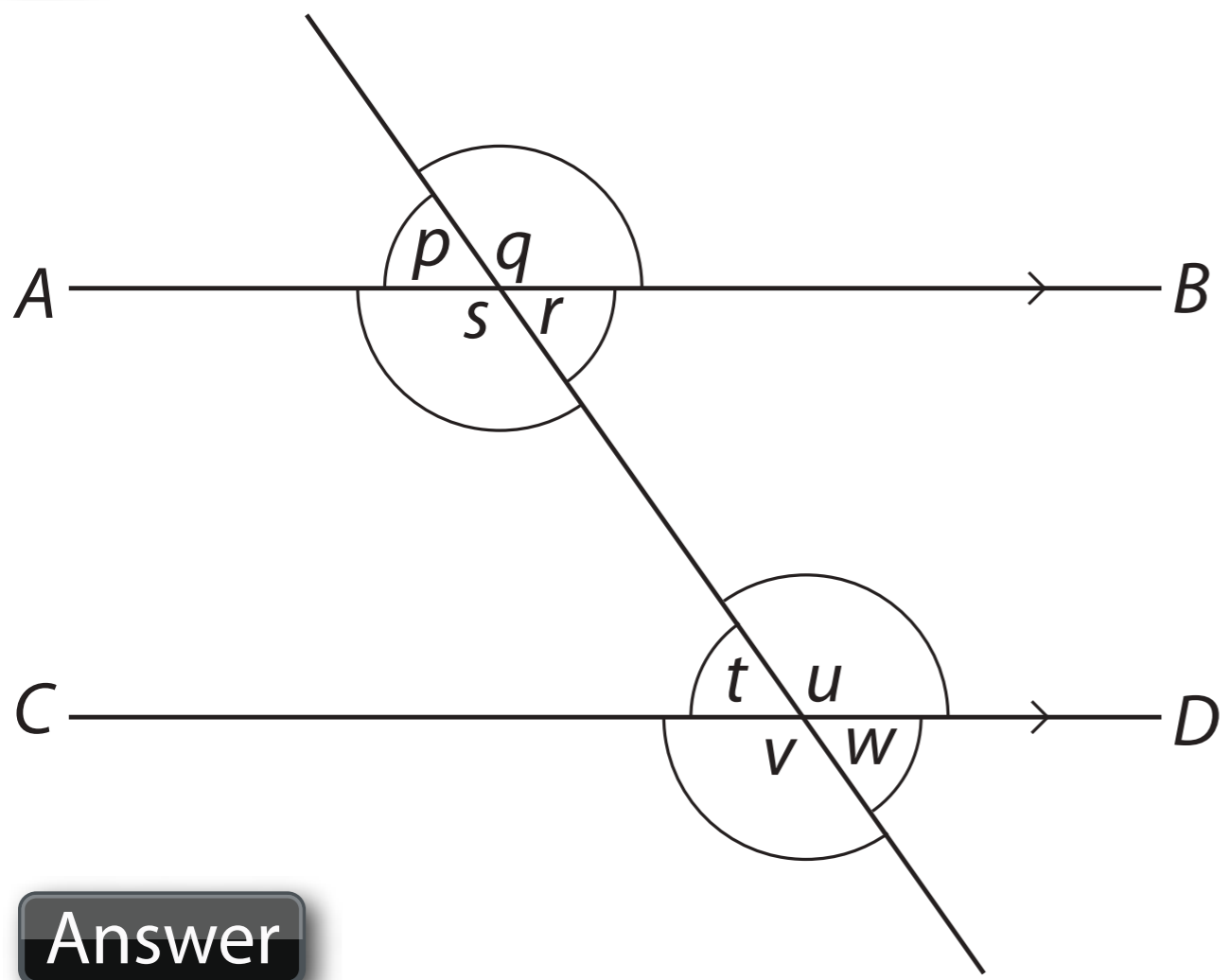
**Alternate**

**Allied**

**Vertically opposite**



**f2** Give examples of angles matching the descriptions.



**Answer**

**Corresponding** *r and w* *s and v*

**Alternate** *s and u* *r and t*

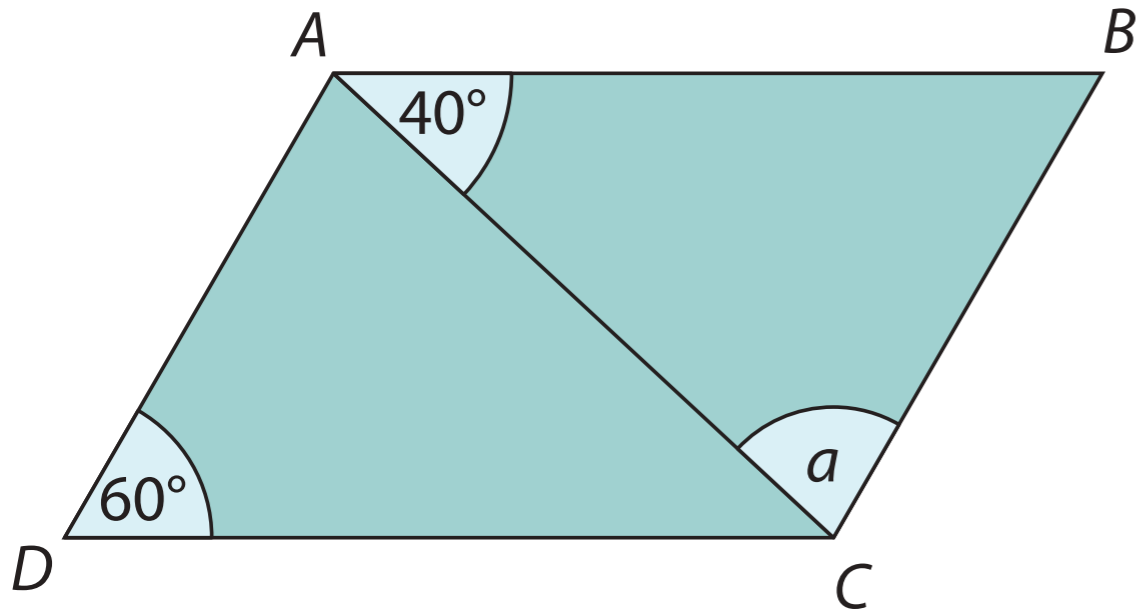
**Allied** *r and w*

**Vertically opposite** *p and r* *q and s*  
*t and w* *u and v*



f3

$ABCD$  is a parallelogram.

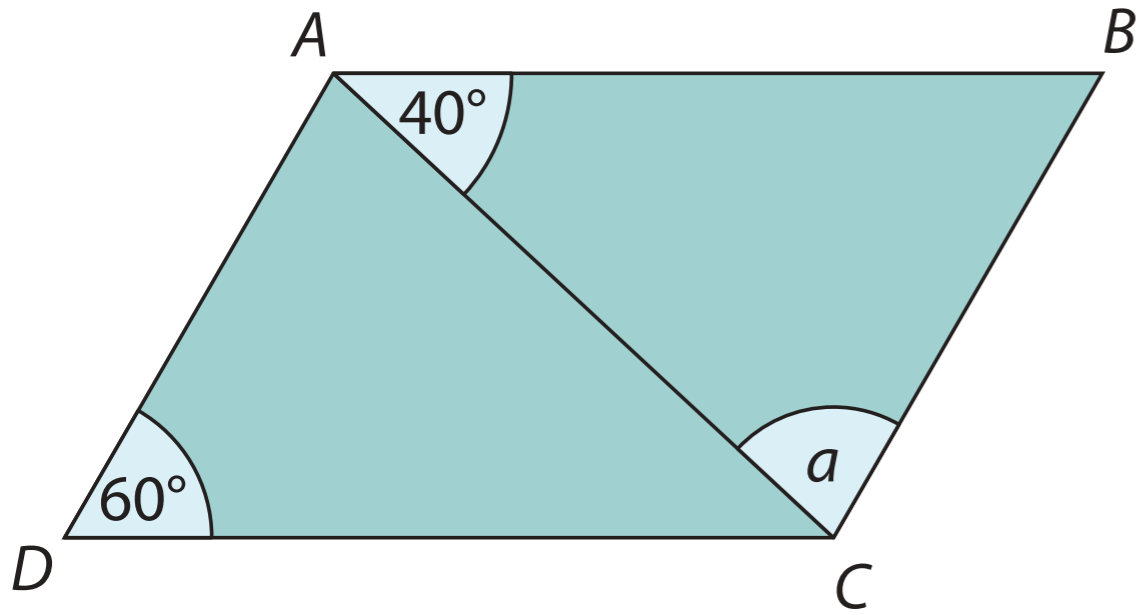


Calculate the size of angle  $a$ .

$a = \square$



**f3**  $ABCD$  is a parallelogram.



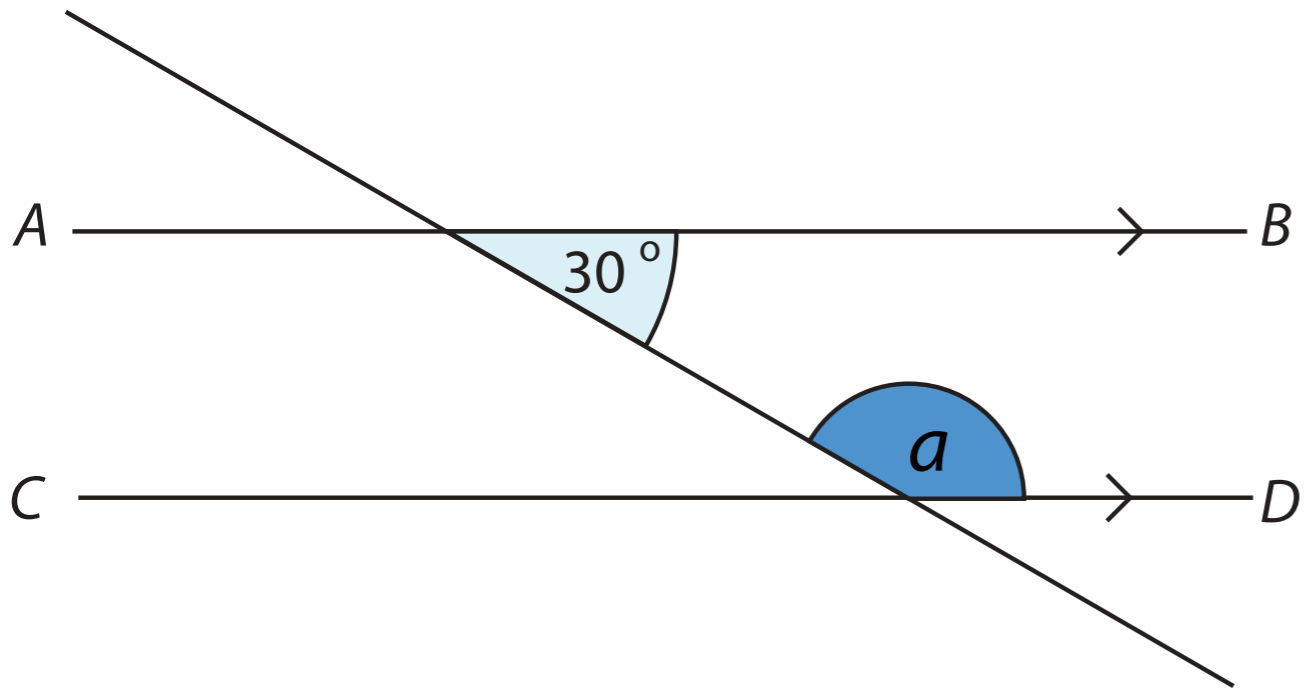
Calculate the size of angle  $a$ .

$$a = 80^\circ$$

**Answer**



ev  $AB$  is parallel to  $CD$ .

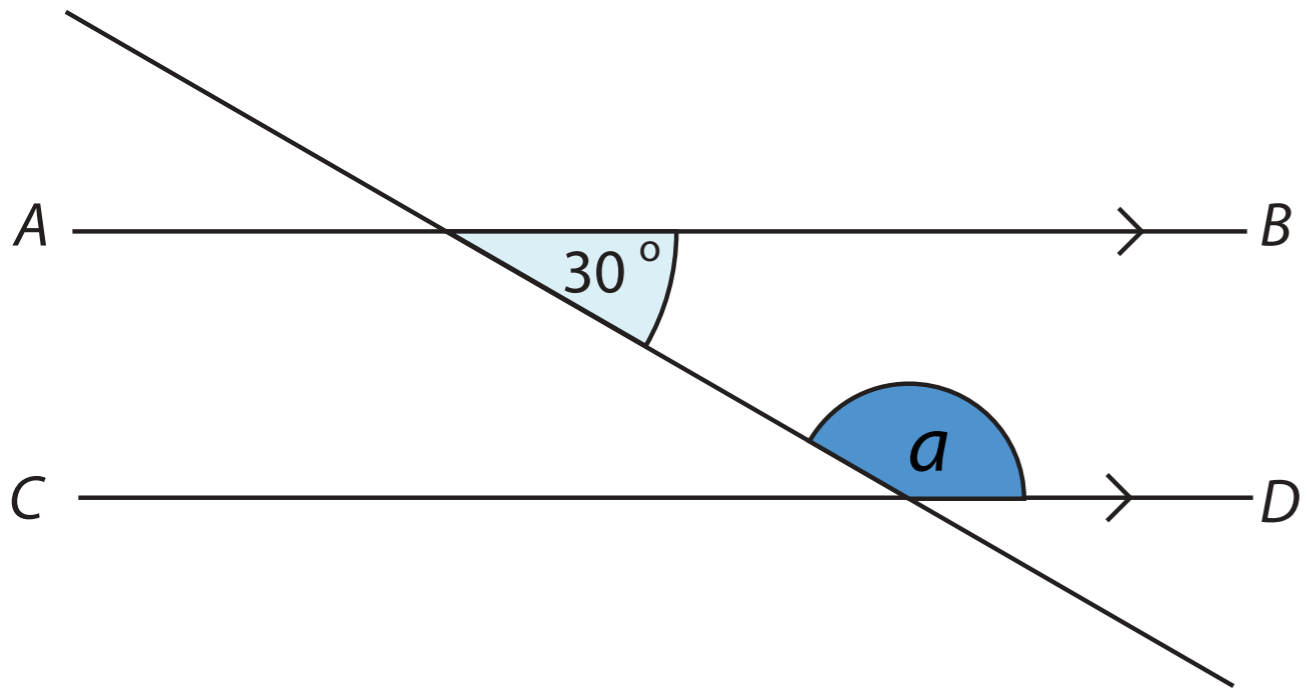


Write down the value of  $a$ .  
Give a reason for your answer.

$a =$



**ev**  $AB$  is parallel to  $CD$ .



Write down the value of  $a$ .  
Give a reason for your answer.

$a = 150^\circ$ , allied angle.

**Answer**

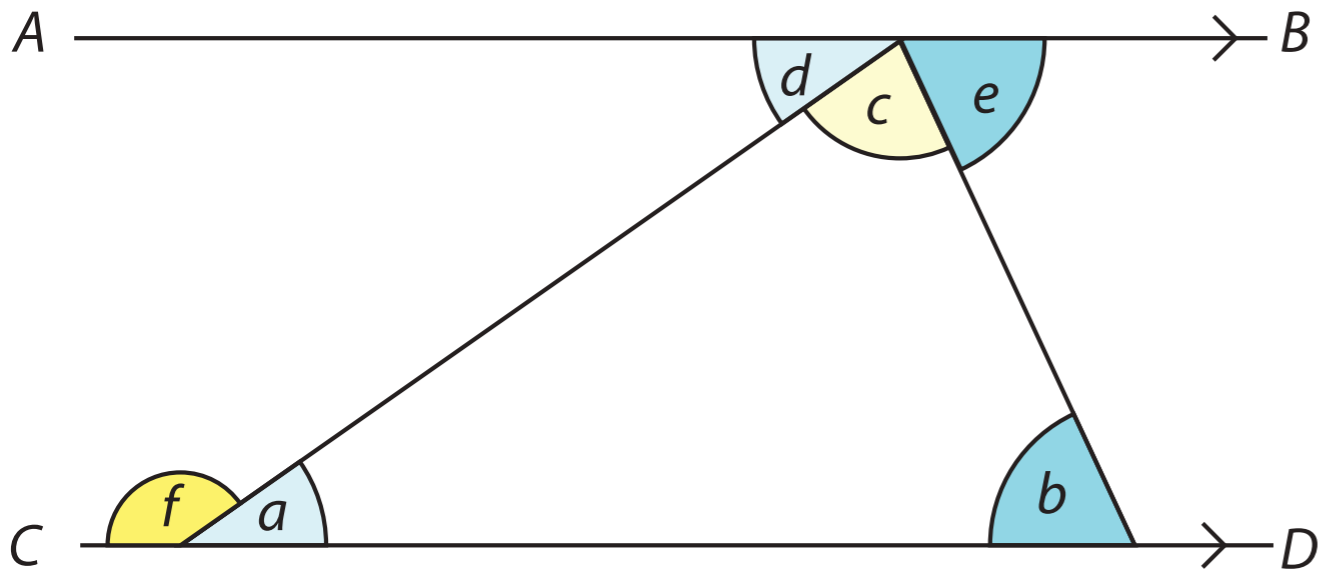




li

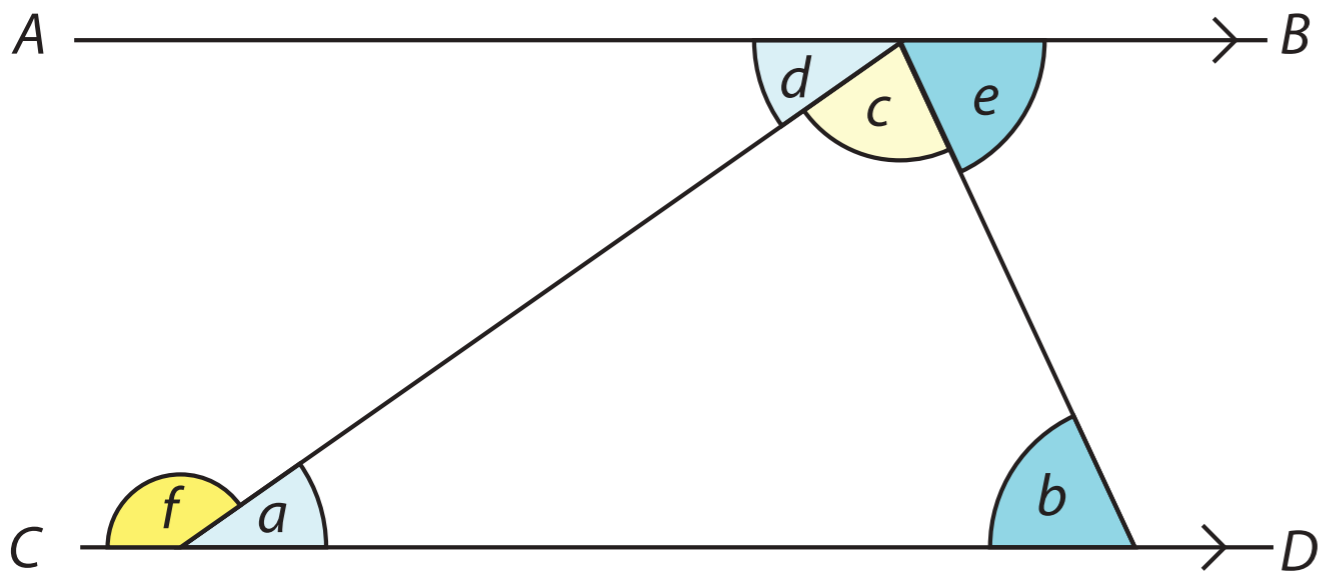
a Show that  $a + b + c = 180^\circ$

b Show that  $f = b + c$



li a Show that  $a + b + c = 180^\circ$

b Show that  $f = b + c$



### Answer

a  $a = d$  and  $b = e$  (alternate angles)

$d + c + e = 180^\circ$  (angles on a line)

$a + b + c = 180^\circ$  (substituting)

b  $b = e$  (alternate angles)

$f = e + c$  (alternate angles)

$f = b + c$  ( $b = e$ )

