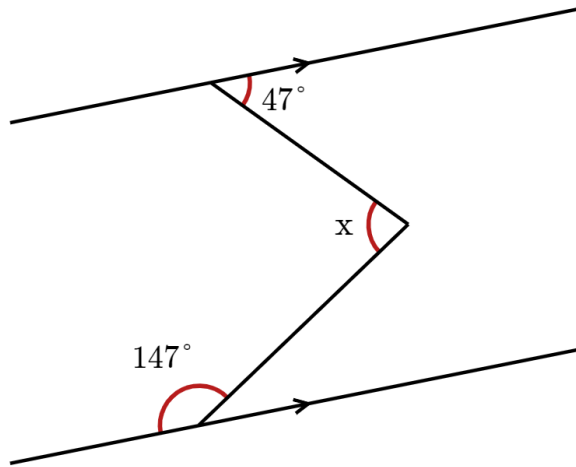
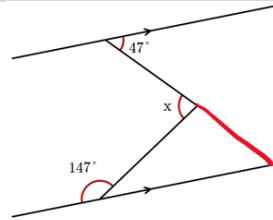


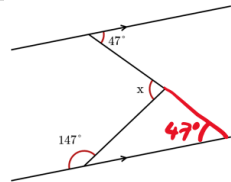
a)
Find the size of the angle marked x :



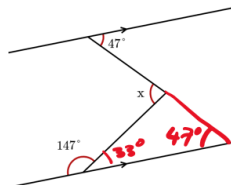
Can you draw in an extra line?



Can you work out any missing angles from the extra line?



Alternate angles in parallel lines are equal.

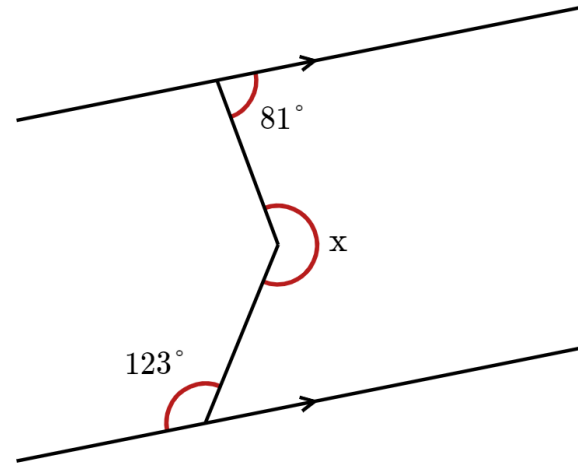


Angles that meet at a point on a straight line sum to 180°

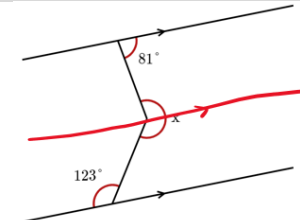
What is the size of the angle marked x ?

$$\begin{aligned} 33^\circ + 47^\circ &= 80^\circ \\ 180^\circ - 80^\circ &= 100^\circ \\ x &= 180^\circ - 100^\circ = 80^\circ \end{aligned}$$

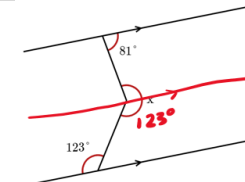
b)
Find the size of the angle marked x :



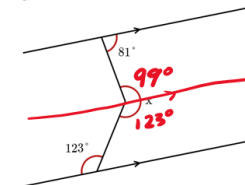
Can you draw in an extra line?



Can you work out any missing angles from the extra line?



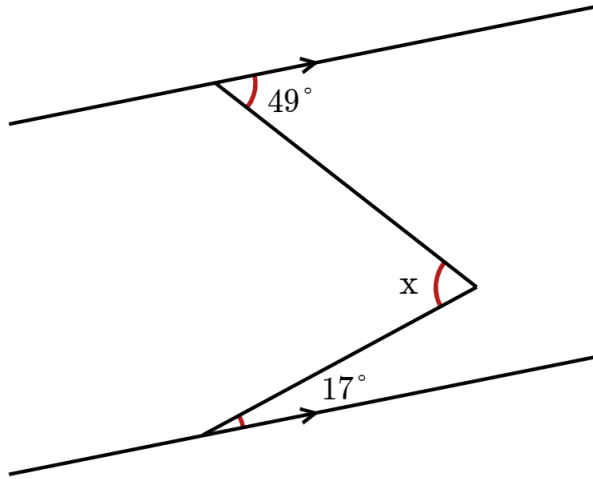
Alternate angles in parallel lines are equal.



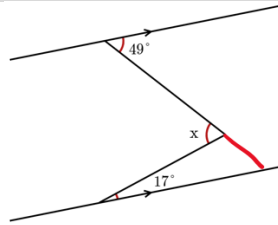
Consecutive interior angles in parallel lines sum to 180°

What is the size of the angle marked x ?

c)
Find the size of the angle marked x :



Can you draw in an extra line?



Can you work out any missing angles from the extra line?

What is the size of the angle marked x ?

d)
Find the size of the angle marked x :

