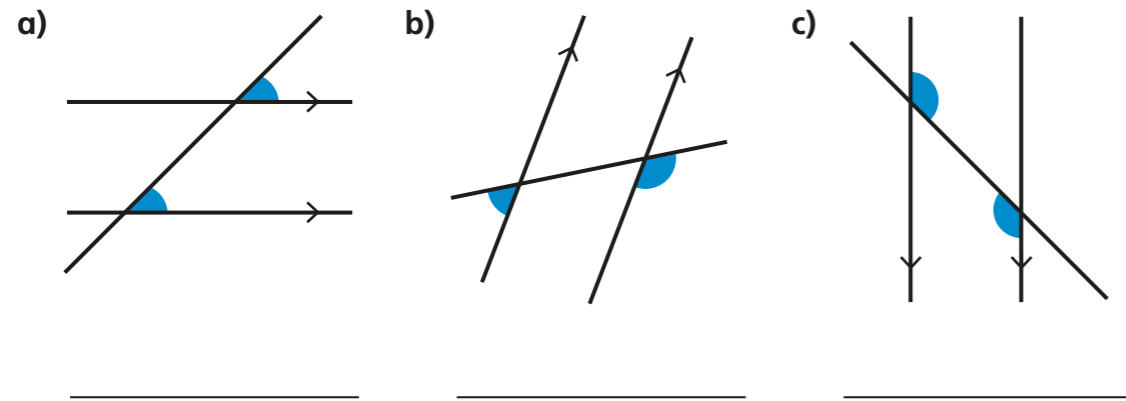


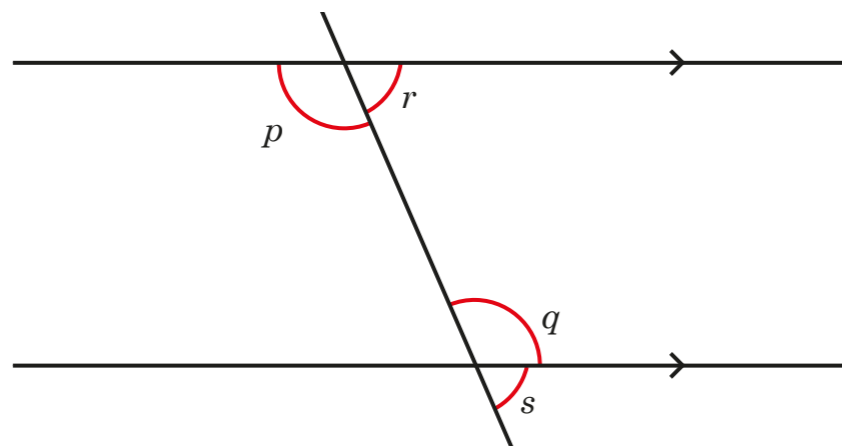
# Understand and use parallel line angle rules

H

1 Are the pairs of angles alternate, corresponding or neither?

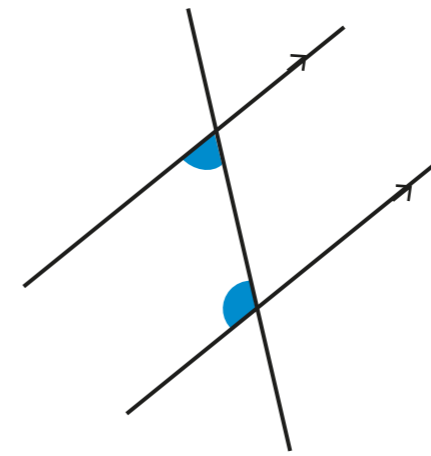


2 Four angles are labelled on the diagram.



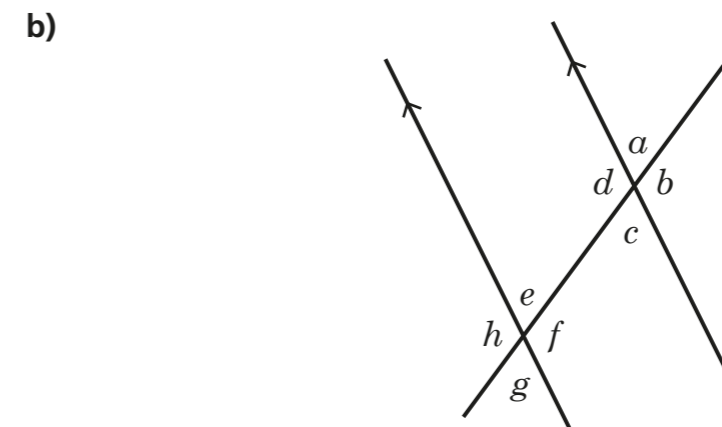
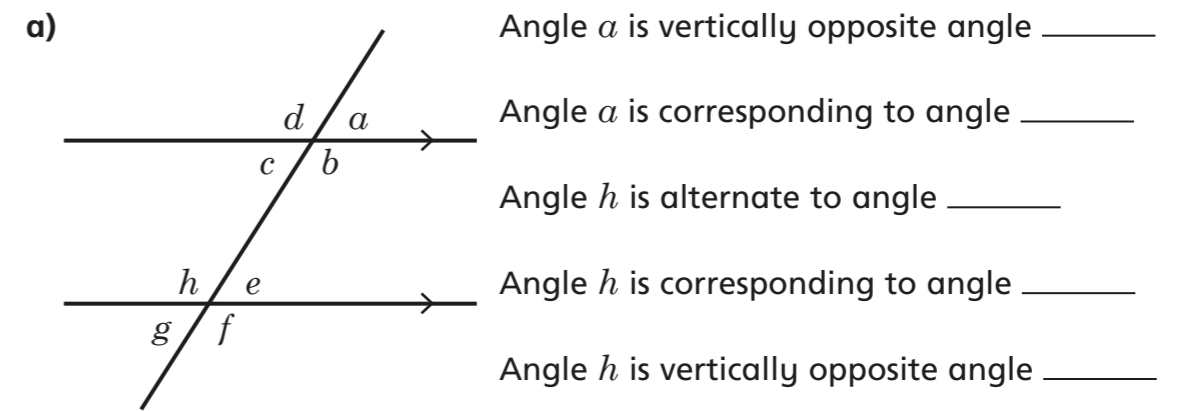
- a)  $p$  and  $q$  are alternate angles. Measure the size of each angle and label them on the diagram.  
What do you notice?
- b) Complete the sentence.  
Alternate angles are \_\_\_\_\_
- c)  $r$  and  $s$  are corresponding angles. Measure the size of each angle and label them on the diagram.  
What do you notice?
- d) Complete the sentence.  
Corresponding angles are \_\_\_\_\_

3 A pair of co-interior angles are shown on the diagram.

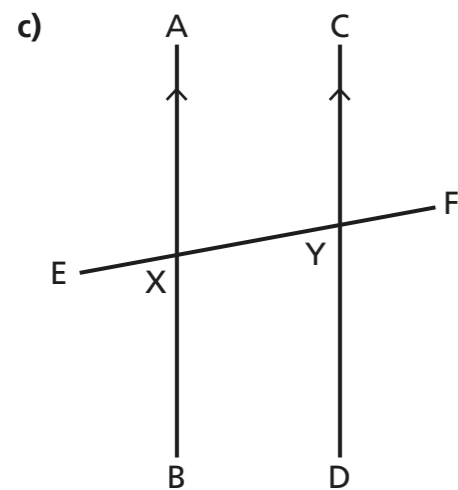


- a) Measure the size of each angle. Label them on the diagram.  
What do you notice?
- b) Complete the sentence.  
Co-interior angles \_\_\_\_\_

4 Complete the sentences.

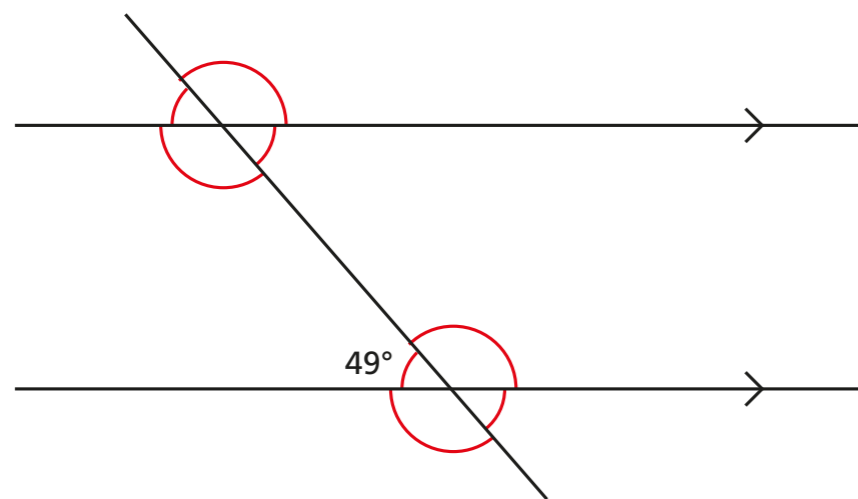


- Angles  $d$  and \_\_\_\_\_ are adjacent angles on a straight line.  
Angles  $d$  and \_\_\_\_\_ are alternate angles.  
Angles \_\_\_\_\_ and  $d$  are corresponding angles.  
Angles  $d$  and \_\_\_\_\_ are vertically opposite angles.



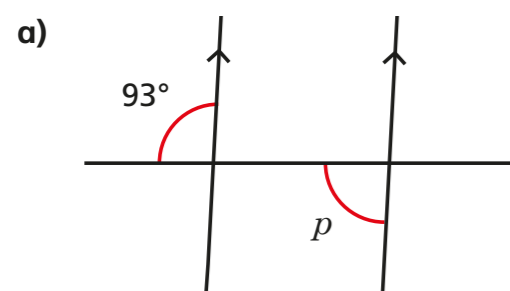
$\angle AXF$  is alternate to \_\_\_\_\_  
 $\angle AXF$  is corresponding to \_\_\_\_\_  
 $\angle DYF$  is corresponding to \_\_\_\_\_  
 $\angle DYF$  is vertically opposite to \_\_\_\_\_  
 $\angle AXF$  and \_\_\_\_\_ are adjacent angles on a straight line.

5 Work out the sizes of the unknown angles and label them on the diagram.

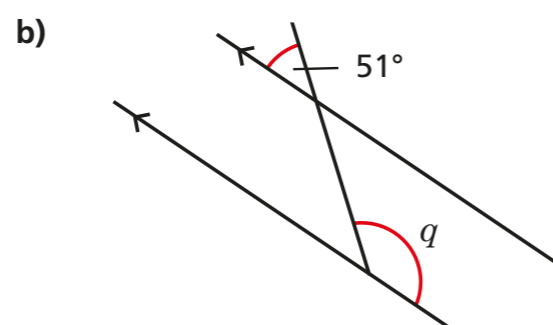


Compare your thinking with a partner.  
 Did you work them out the same way?

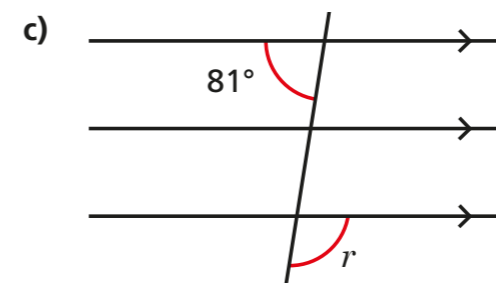
6 Work out the sizes of the unknown angles.



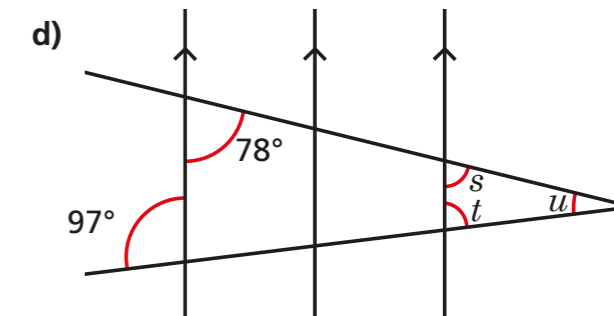
$p =$



$q =$



$r =$

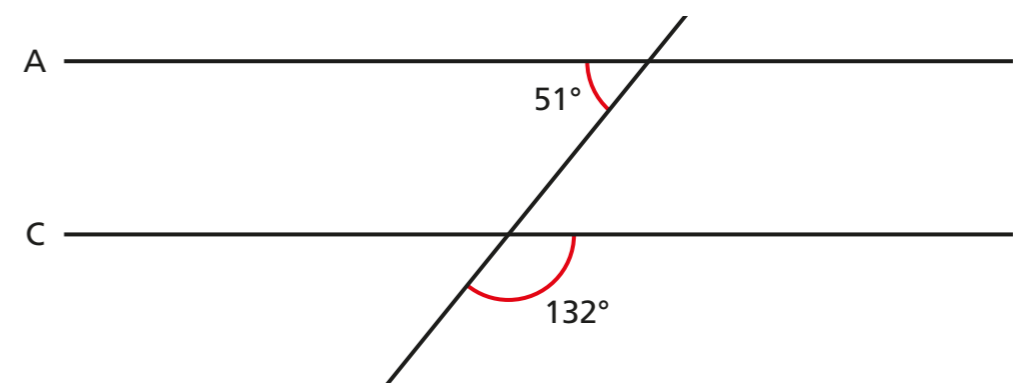


$s =$    $u =$

$t =$

Discuss your reasons with a partner.

7



Are line segments AB and CD parallel? \_\_\_\_\_

Explain your answer.

\_\_\_\_\_  
 \_\_\_\_\_