

## Parallel Lines and Angles

The reasons for the following questions are one of the following KEY PHRASES

Alternate to angle \_\_\_\_

Corresponding with angle \_\_\_\_

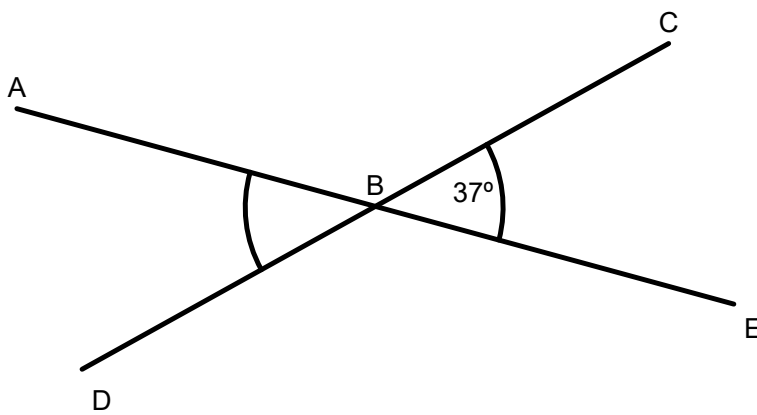
Co-interior with angle \_\_\_\_

Vertically opposite angle \_\_\_\_

Angles on a straight line total  $180^\circ$

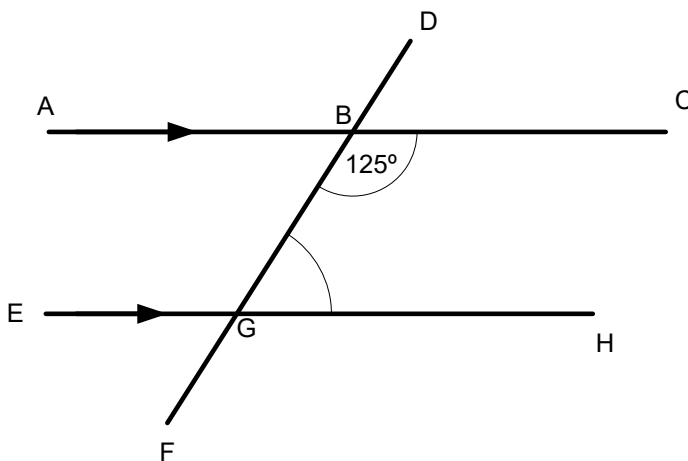
Angles about a point total  $360^\circ$

1



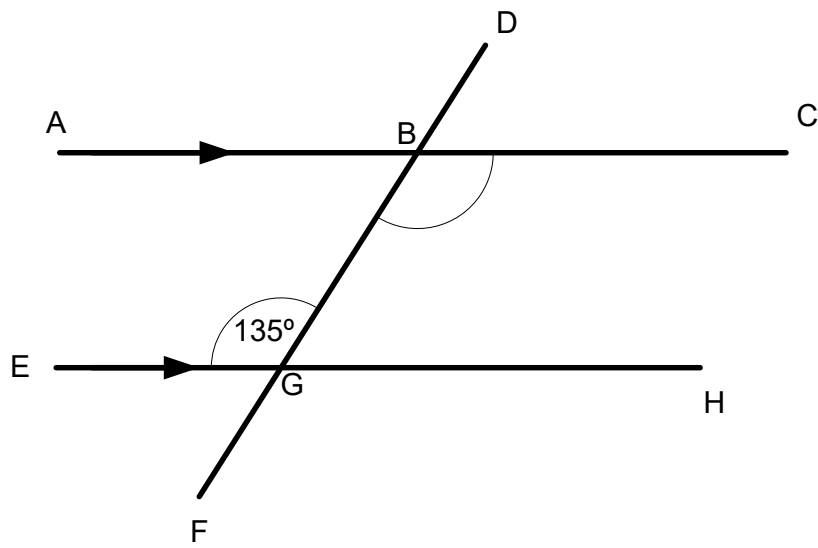
$$\angle ABD = \underline{\hspace{2cm}} \quad \left( \underline{\hspace{10cm}} \right)$$

2



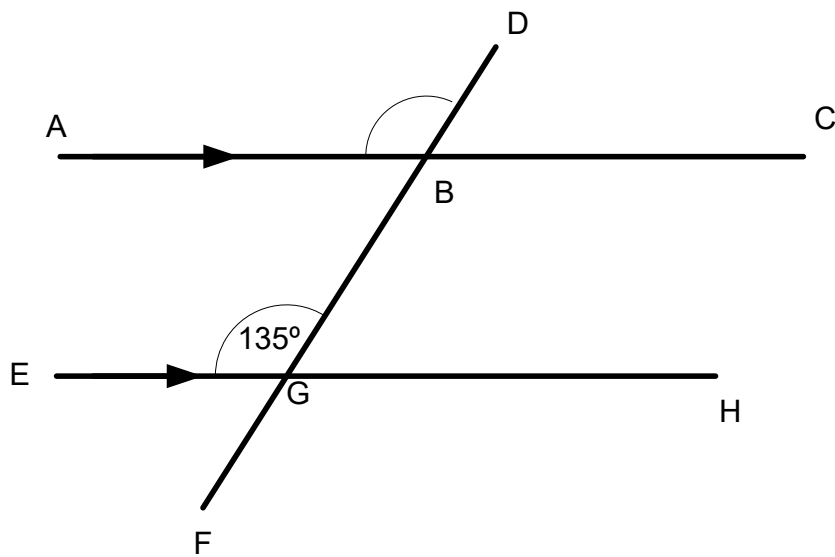
$$\angle BGH = \underline{\hspace{2cm}} \quad \left( \underline{\hspace{10cm}} \right)$$

3



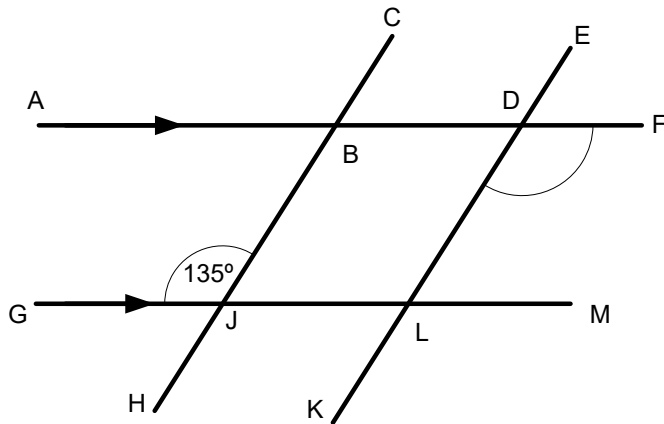
$\angle GBC =$  \_\_\_\_\_ ( \_\_\_\_\_ )

4



$\angle ABD =$  \_\_\_\_\_ ( \_\_\_\_\_ )

5

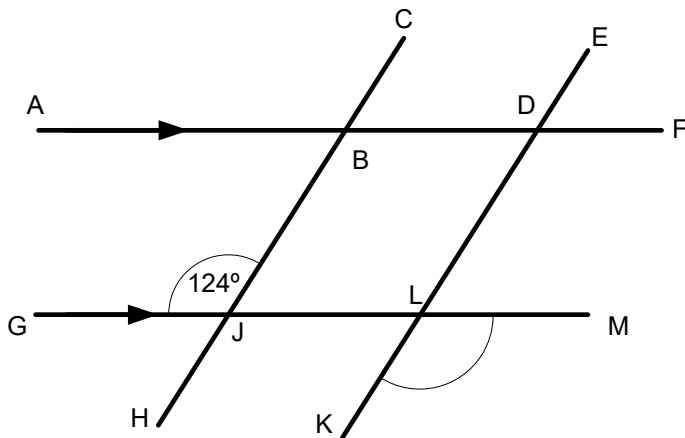


$$\angle GJB = \underline{\quad} \quad ( \text{Given} )$$

$$\angle JLD = \underline{\quad} \quad ( \underline{\hspace{2cm}} )$$

$$\angle LDF = \underline{\quad} \quad ( \underline{\hspace{2cm}} )$$

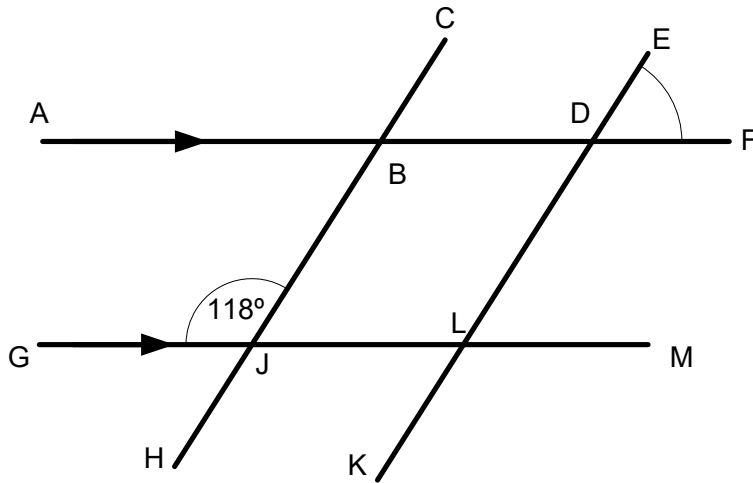
6



$$\angle GJB = \underline{\quad} \quad ( \text{Given} )$$

$$\angle JLD = \underline{\quad} \quad ( \underline{\hspace{2cm}} )$$

$$\angle KLM = \underline{\quad} \quad ( \underline{\hspace{2cm}} )$$



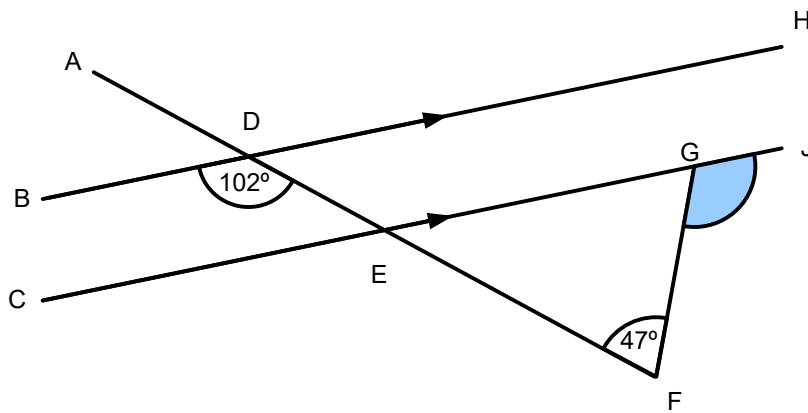
$$\angle GJB = \underline{\quad\quad} \quad \left( \text{Given} \right)$$

$$\angle JLD = \underline{\quad\quad} \quad \left( \underline{\quad\quad\quad\quad\quad\quad\quad\quad} \right)$$

$$\angle BDE = \underline{\quad\quad} \quad \left( \underline{\quad\quad\quad\quad\quad\quad\quad\quad} \right)$$

$$\angle EDF = \underline{\quad\quad} \quad \left( \underline{\quad\quad\quad\quad\quad\quad\quad\quad} \right)$$

### Challenge Question



Calculate the size of angle FGJ. Explain your reasoning.