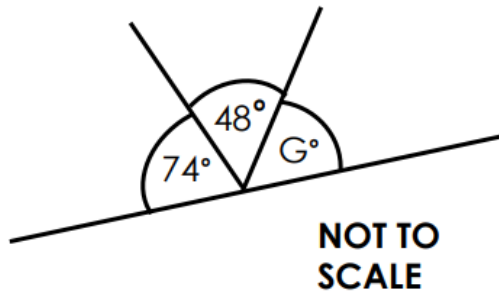


## Explain the mistakes



Calculate the size of angle G

### Mistake 1

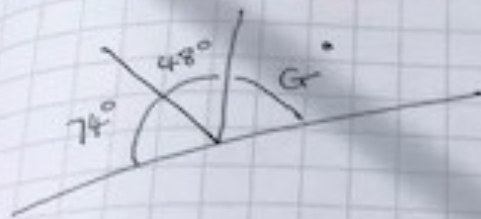
$$360^\circ - (74^\circ + 48^\circ) = 238^\circ$$

### Mistake 2

$$74^\circ + 48^\circ = 122^\circ$$

### Mistake 3

$$74^\circ + 48^\circ = 122^\circ$$
$$180^\circ - 122^\circ = 68^\circ$$



• Mistake 1  
 $360^\circ - (74^\circ + 48^\circ) = 238^\circ$ .

Angles on a straight line add to  $180^\circ$  not  $360^\circ$ .

### • Mistake 2

$74^\circ + 48^\circ = 122^\circ$ . Yes this is the total of these two angles, but now need to subtract from  $180^\circ$ .

### • Mistake 3

$$74^\circ + 48^\circ = 122^\circ$$

$$180^\circ - 122^\circ = 68^\circ$$

Yes  $8 + 2$  makes  $10$  and  $120 + 60$  makes  $180$ .

But then you have an additional  $10$ . These three angles total  $190^\circ$ .

Correct workings:

$$74^\circ + 48^\circ = 122^\circ$$

$$74^\circ + 48^\circ + G = 180^\circ$$

$$180^\circ - 122^\circ = G \quad G = 58^\circ$$

## Different ways

The hands of a clock are  $90^\circ$  apart at 3-o'clock and 9-o'clock.



**At what time are the hands of a clock  $75^\circ$  apart?**

Find two ways.

