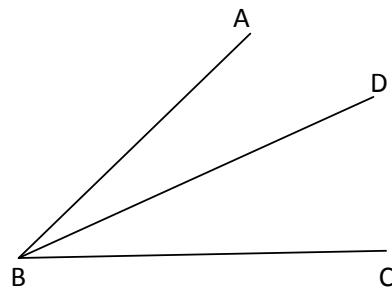


**Find the measure of  $\angle ABD$  if the measure of angle  $\angle ABC=57^\circ$ , the measure of  $\angle ABD$  is represented by  $2x-1$  and the measure of  $\angle DBC$  is represented by  $5x+2$**



**Solution:**

$$\angle ABC = \angle ABD + \angle DBC, \text{ so}$$

$$2x-1+5x+2=57$$

$$7x=56$$

$$x=8$$

$$\angle ABD=2x-1=2*8-1=15$$

**Answer:** the measure of  $\angle ABD$  is  $15^\circ$