Q:Check whether -150 is a term of the AP: 11,8,5,2,....

Solution: Let nth term of given AP be a_n

Given:

First term=11 and Common difference= -3

$$a_n = 11 + (n-1)(-3)$$
$$a_n = 14 - 3n$$

Now, we need to check if -150 is a term of the given AP.

$$-150 = 14 - 3n$$
$$3n = 164$$
$$n = 164/3$$

$$\text{Here } n \notin N$$

Thus -150 is not a term of the given AP.