

Guided Practice

a. Proof: Assume that $-17 = k$

An integer n is odd if and only if n can be expressed as twice some integer plus 1, that is if n can be written of the form $2k + 1$ where k is some integer.

To check if -17 is an odd integer

$$n \Rightarrow \text{odd}$$

$$n = 2k + 1$$

$$= 2(-17) + 1$$

$$= -34 + 1$$

$$= -33$$

$\therefore, -17$ is an odd integer