

34.  $f$  odd  $\Leftrightarrow f(-x) = -f(x)$   
 $f$  continuous on the right  $\Leftrightarrow \lim_{x \rightarrow 0^+} f(x) = f(0)$

Therefore, letting  $t = -x$ , we obtain

$$\begin{aligned} \lim_{x \rightarrow 0^-} f(x) &= \lim_{t \rightarrow 0^+} f(-t) = \lim_{t \rightarrow 0^+} -f(t) \\ &= -f(0) = f(-0) = f(0). \end{aligned}$$

Therefore  $f$  is continuous at 0 and  $f(0) = 0$ .