

You may have correctly determined that the reference angle is  $45^\circ$  and found  $\tan 45^\circ$ , but you made a mistake with the sign. Use the signs of  $x$  and  $y$  in the second quadrant to determine the sign of tangent, remembering that

$\tan \theta = \frac{y}{x}$ . The correct answer is  $-1$ .