Length $= l$ and Width $= l - 15$

$100 = l(l - 15)$

$100 = l^2 - 15l$

$0 = l^2 - 15l - 100$

$0 = (l - 20)(l + 5)$

$l = 20$ or $l = -5$

Since the length is 20, the width is $20 - 15 = 5$.