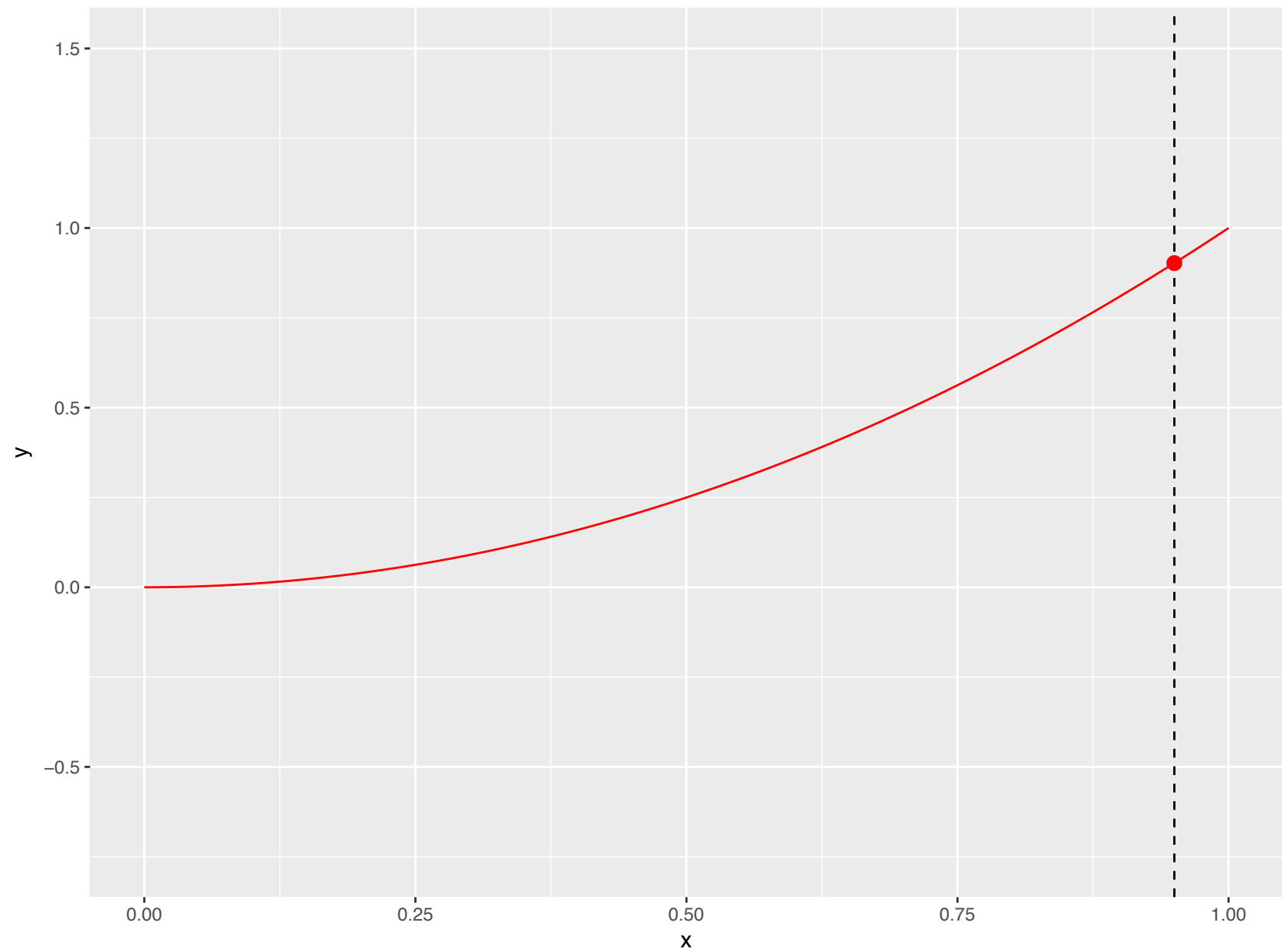
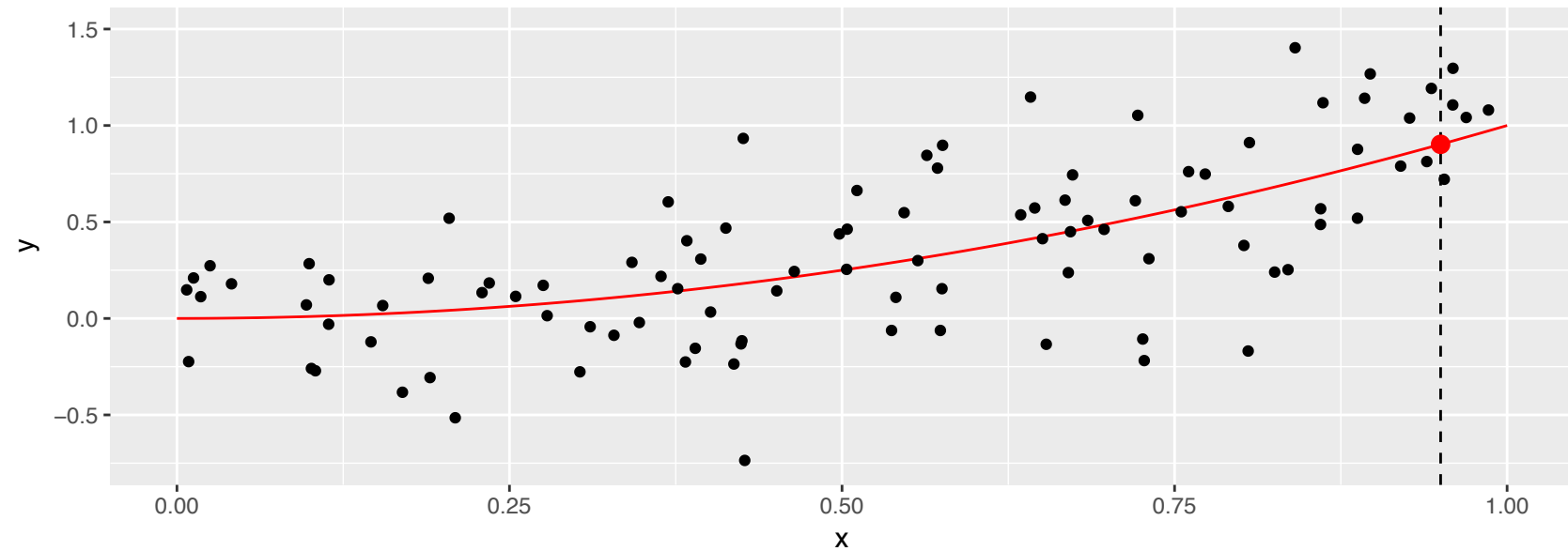


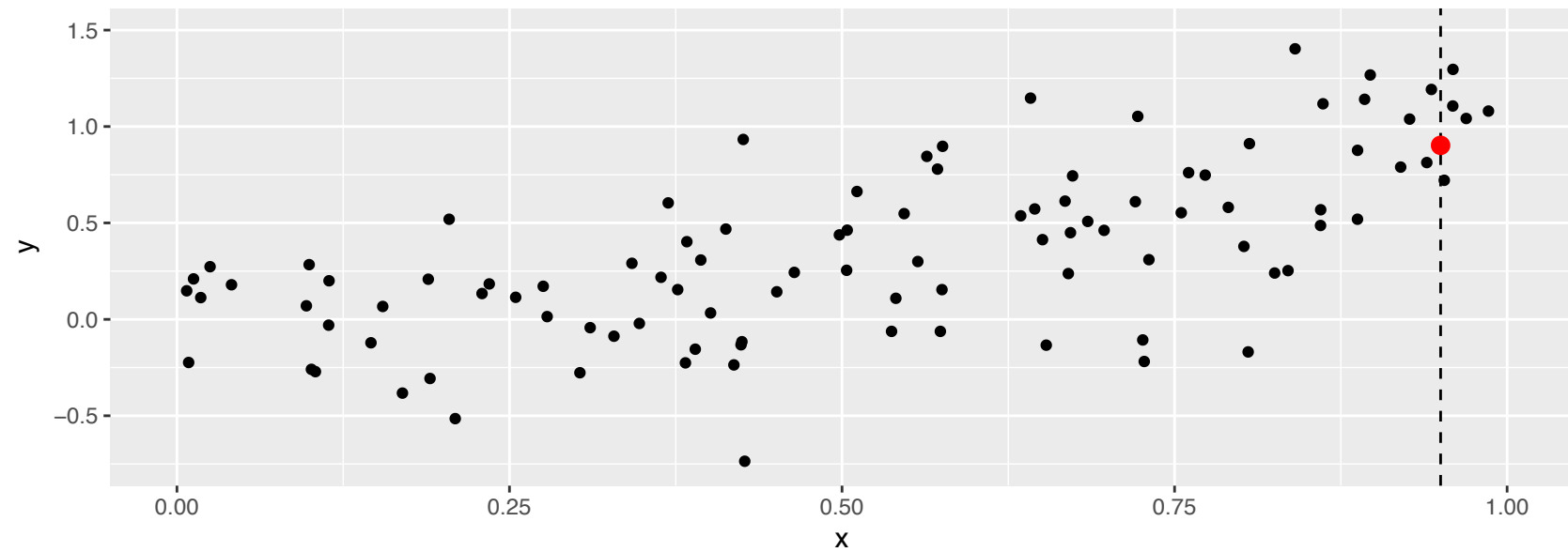
Plot 1: True  $f(x)$  + Target point to predict ( $0.95, f(0.95)$ )



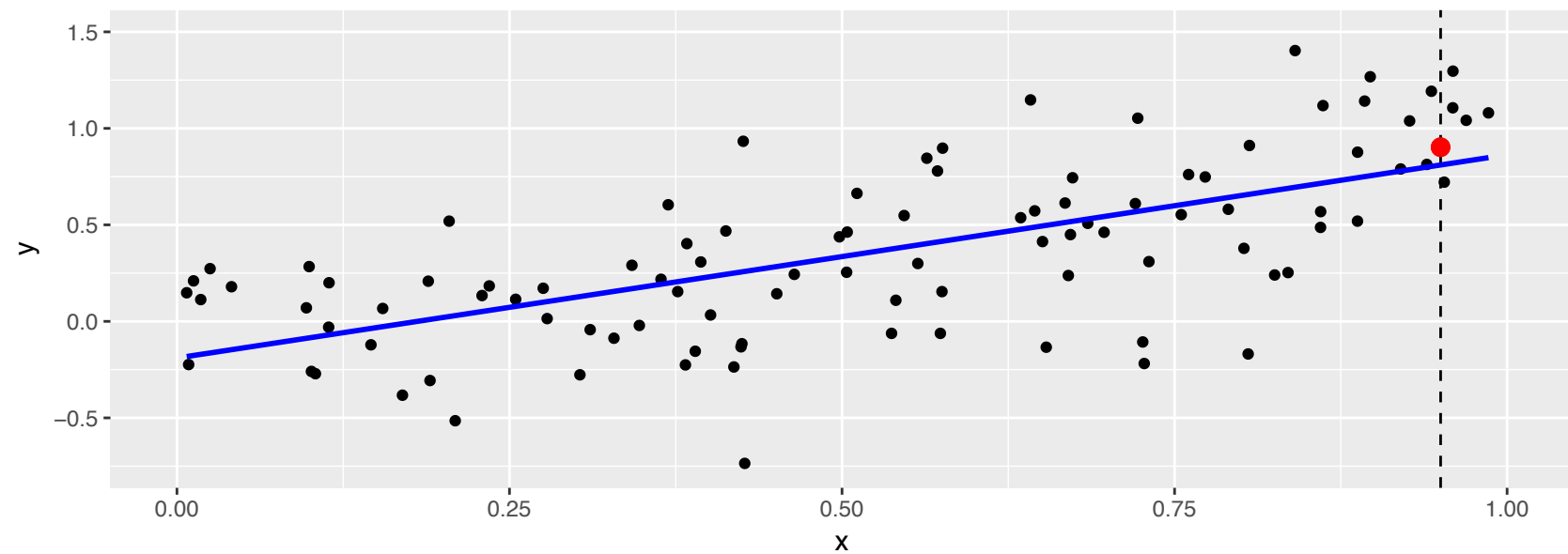
Plot 2a: Generate sample of  $n=100$  new points



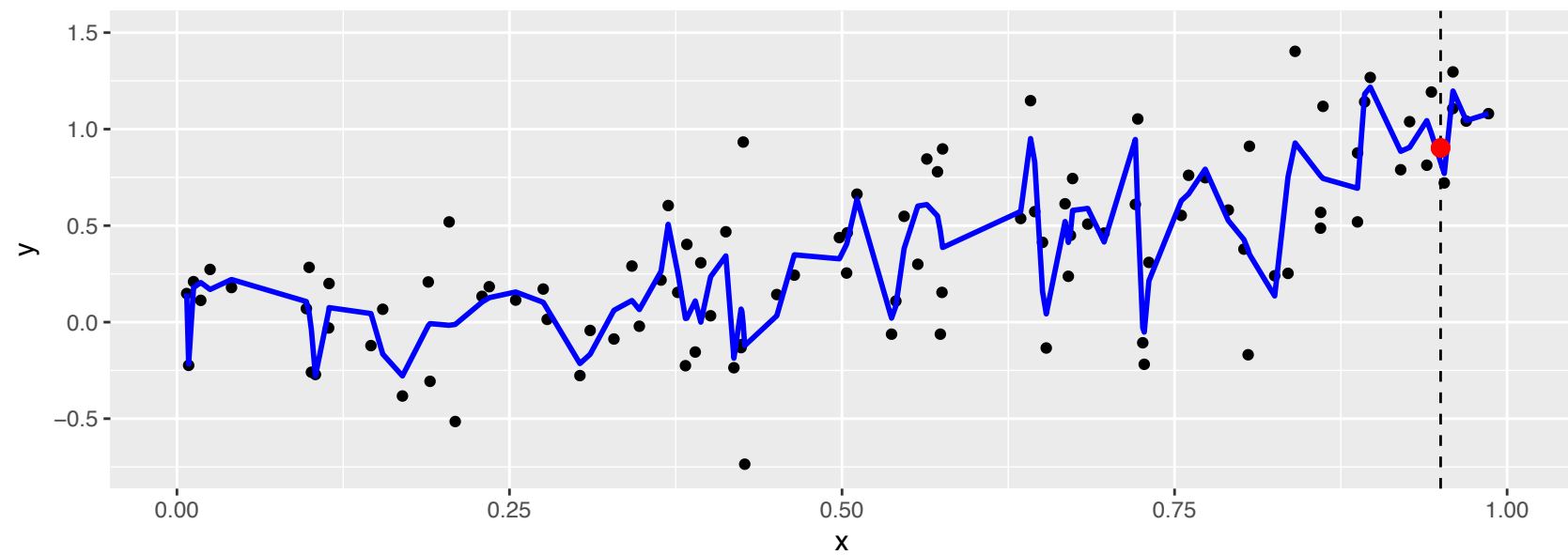
Plot 2b: Recall in practice we won't know true  $f(x)$



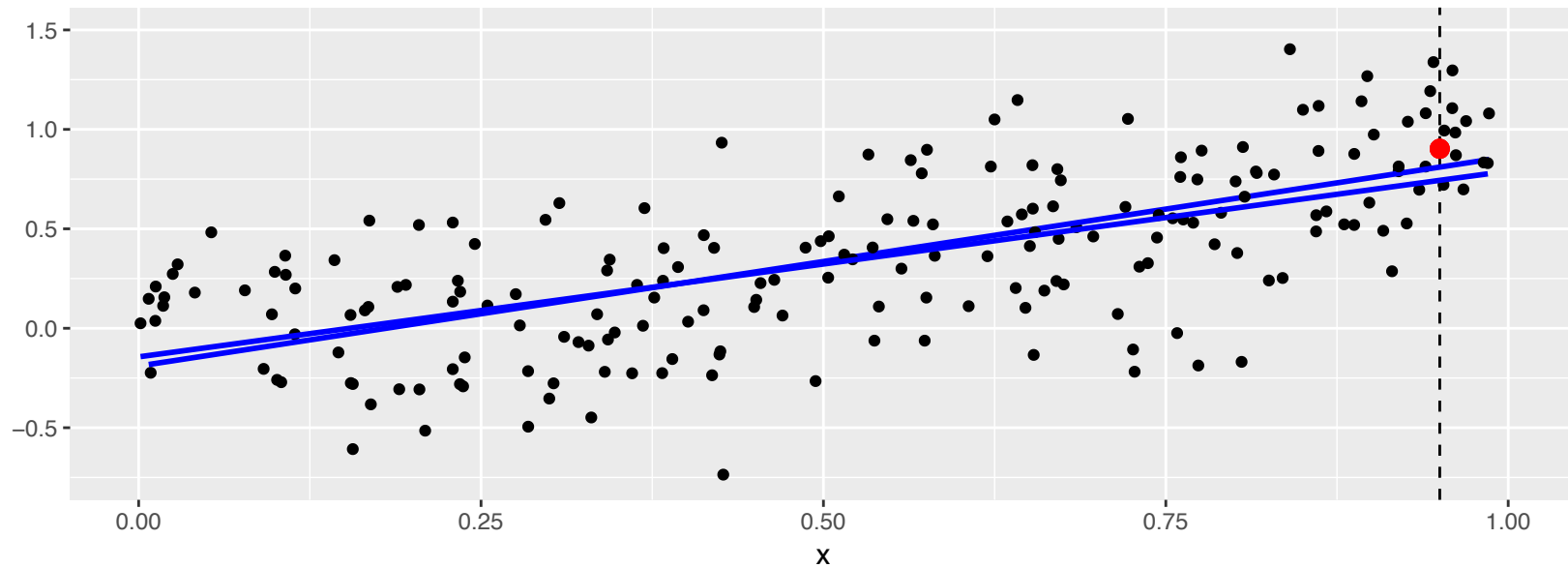
Plot 3: Spline fit w/ df = 2



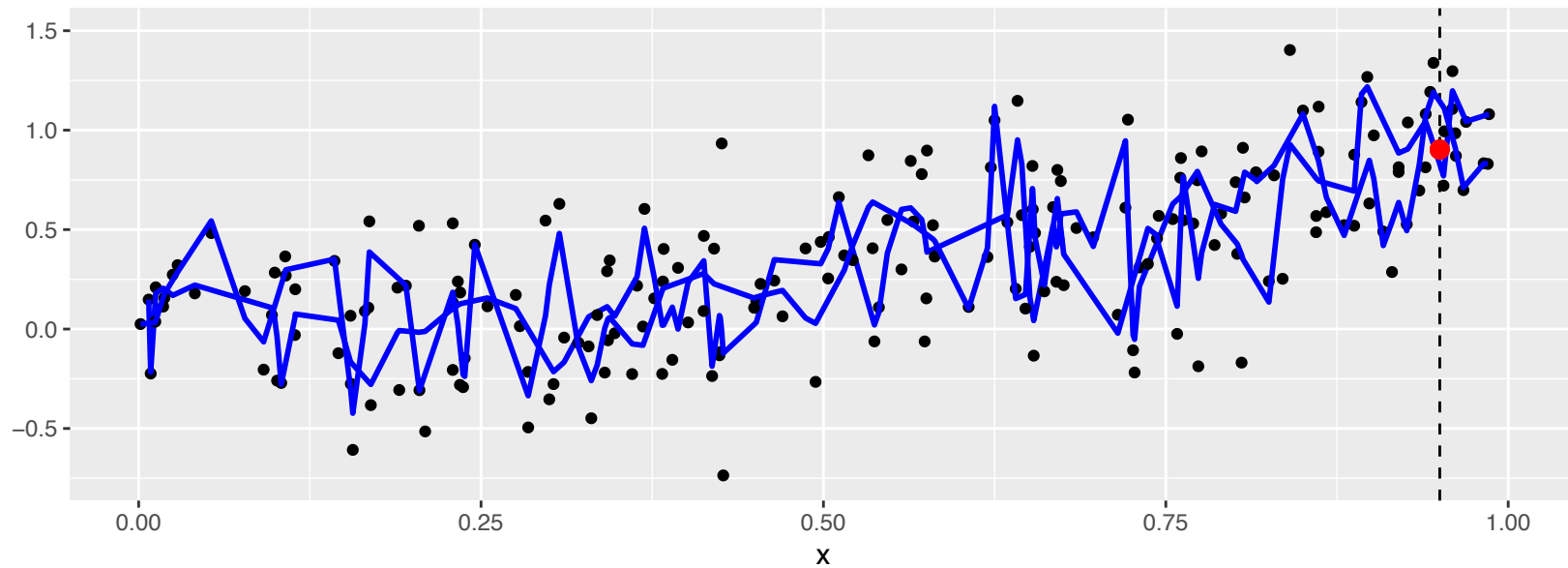
Plot 3: Spline fit w/ df = 99



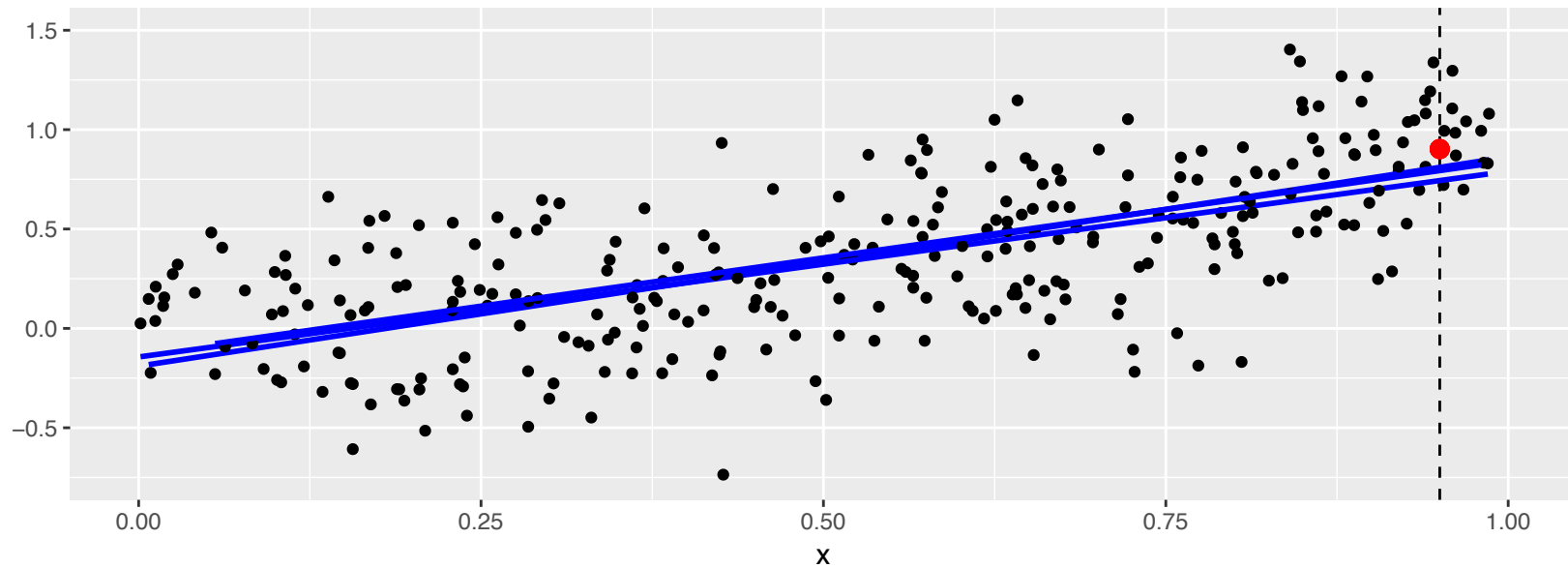
Plot 4: New spline fit w/ df = 2 based on new sample of size n=100



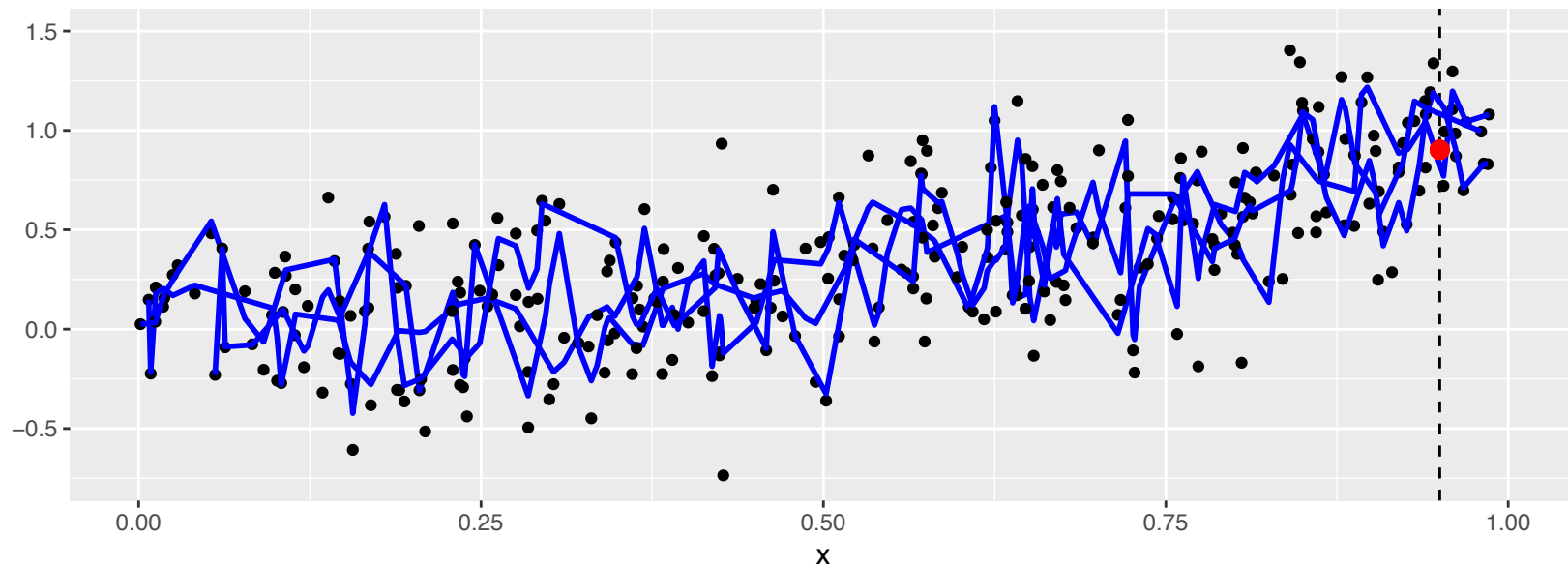
Plot 4: New spline fit w/ df = 99 based on new sample of size n=100



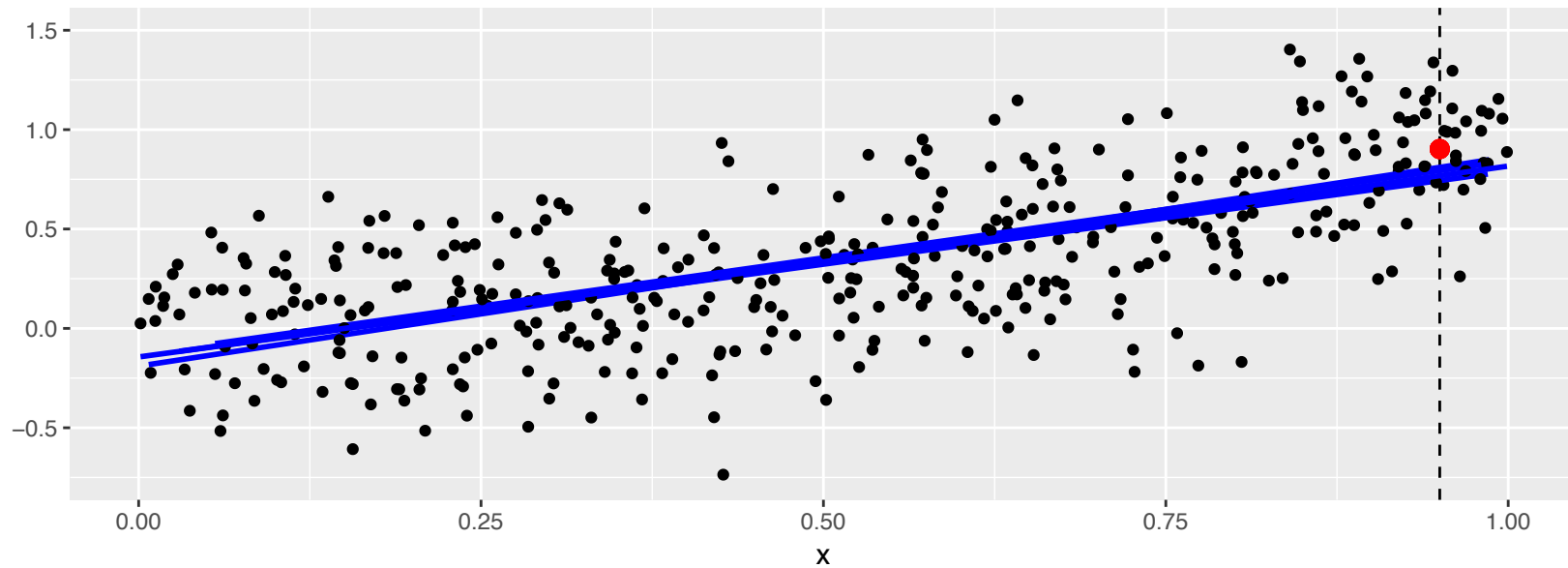
Plot 5: New spline fit w/  $df = 2$  based on new sample of size  $n=100$  again



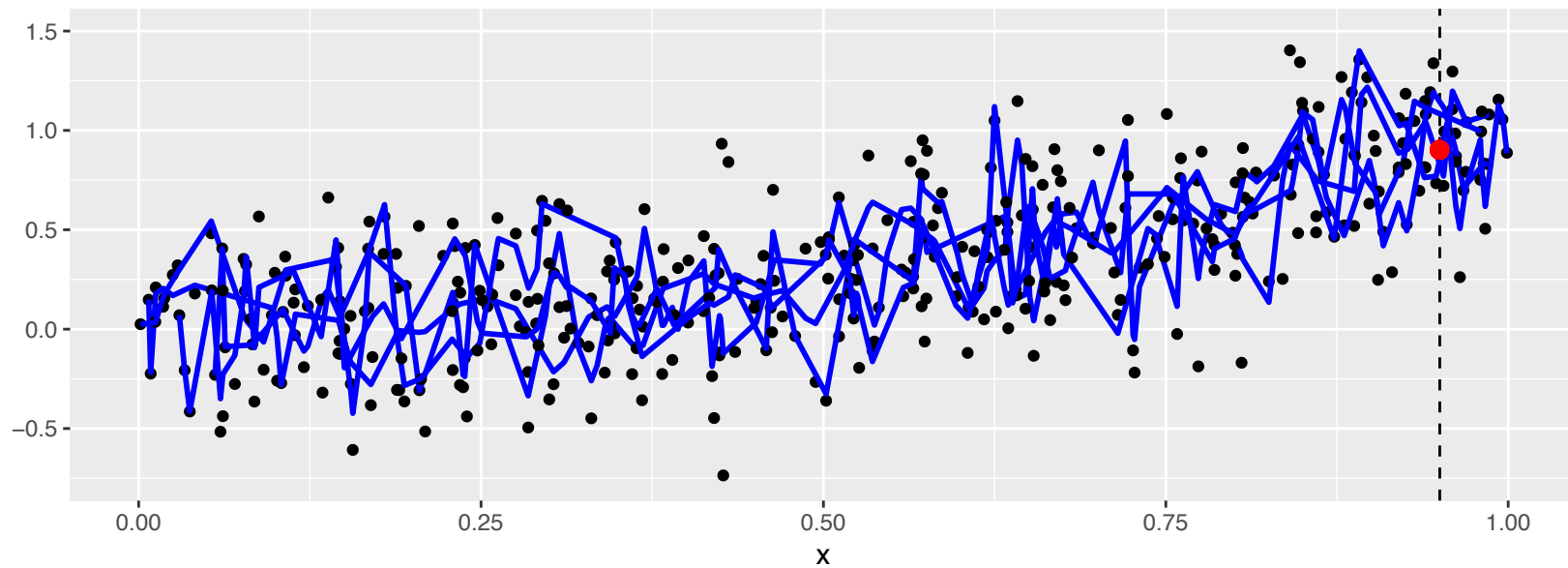
Plot 5: New spline fit w/  $df = 99$  based on new sample of size  $n=100$  again



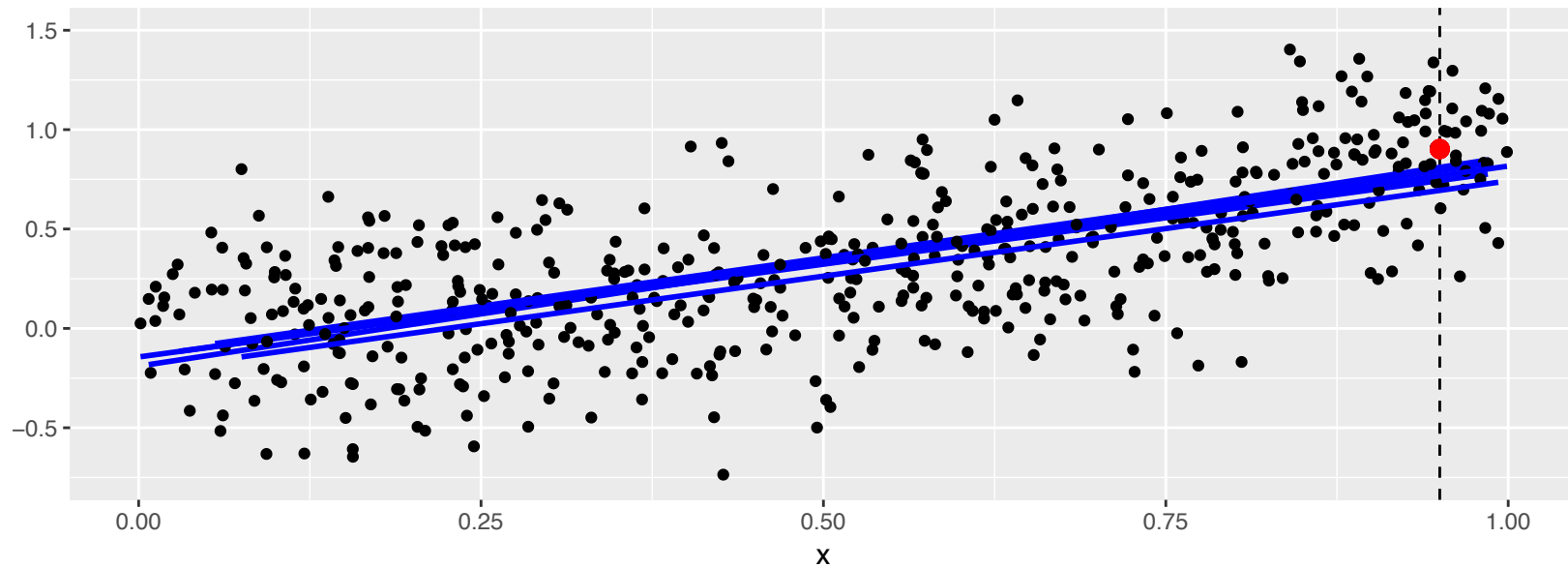
Plot 6: New spline fit w/  $df = 2$  based on new sample of size  $n=100$  again



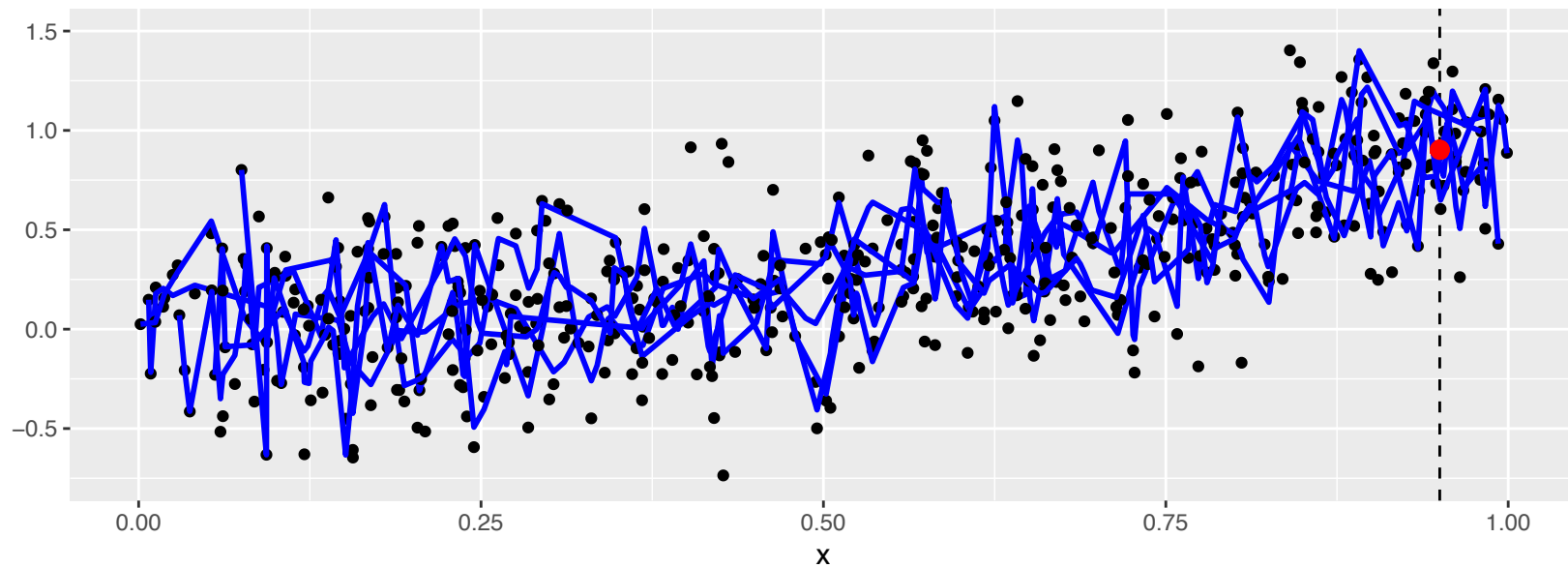
Plot 5: New spline fit w/  $df = 99$  based on new sample of size  $n=100$  again



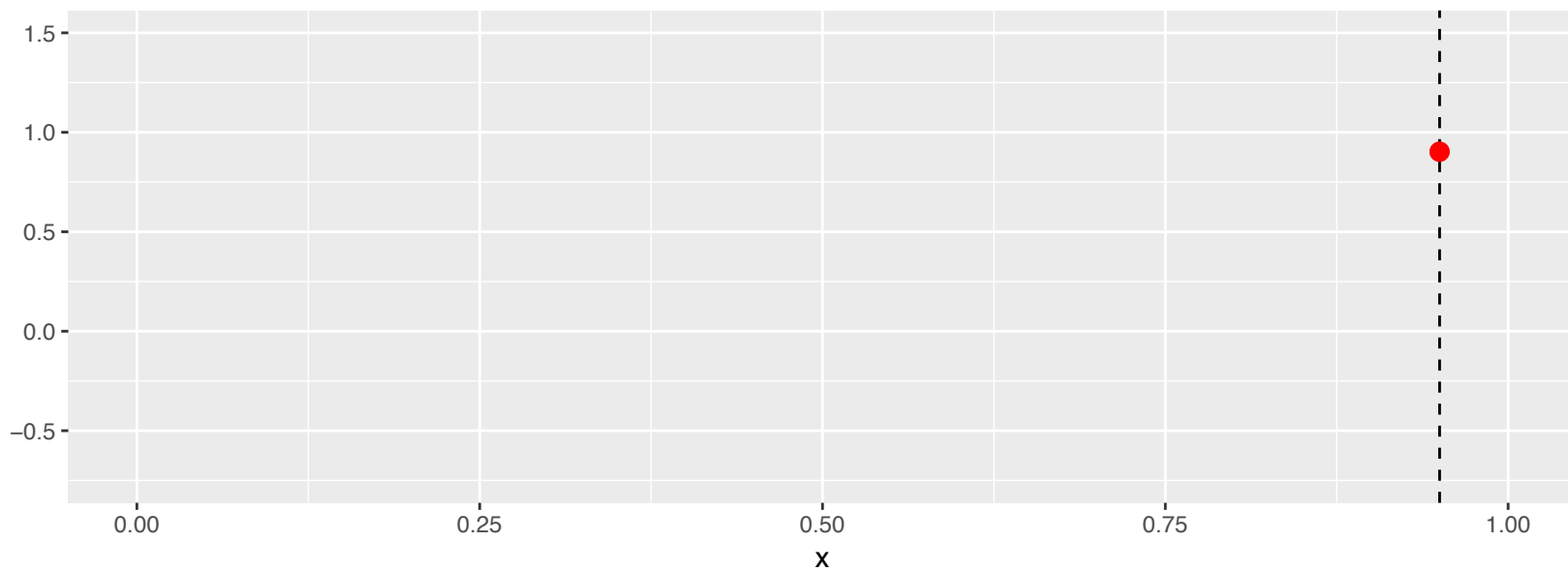
Plot 7: New spline fit w/ df = 2 based on new sample of size n=100 again



Plot 7: New spline fit w/ df = 99 based on new sample of size n=100 again



Plot 8: 50 different spline fits w/  $df = 2$  based on 50 different samples of size  $n = 100$



Plot 8: 50 different spline fits w/  $df = 99$  based on 50 different samples of size  $n = 100$

