

1. Find  $(f^{-1})'(x)$  at  $x = 1$  if  $f(x) = x^3 - 3x^2 + 2x + 1$ .

2. Find  $(f^{-1})'(x)$  at  $x = 1$  if  $f(x) = x^5 + 3x^3 - 2x^2 + x - 2$ .

3. Find  $(f^{-1})'(x)$  at  $x = 3$  if  $f(x) = \sqrt{x^2 - 7}$  for  $x \geq \sqrt{7}$ .

4. Find  $(f^{-1})'(x)$  at  $x = -9$  if  $f(x) = x^5 + 3x^3 - 2x^2 + x - 2$ .

5. Find  $(f^{-1})'(x)$  at  $x = -3$  if  $f(x) = 1 + 3x + x^3$ .