Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. Find the derivative of \( y = \frac{x^2 + 4x + 3}{\sqrt{x}} \).

2. Find the derivative of \( f(x) = e^x \sqrt{x} \).

3. Find the derivative of \( y = (r^2 - 2r) e^r \).