

1.6 Exercises

Problem 1 Find the general solution to: $xy' = y + 2\sqrt{xy}$

Problem 2 Find the general solution to: $x^2y' = xy + y^2$.

Problem 3 Find the general solution to: $y^2y' + 2xy^3 = 6x$

Problem 4 Verify $(4x - y)dx + (6y - x)dy = 0$ is exact; then solve it.