

Review Sheet #1 - Chain Rule, Trig Functions, Implicit Differentiation

Find dy/dx for each:

1) $xy + y^2 = 1$

2) $x^2y + xy^2 = 10$

3) $y = \cos(1 - 2x)$

4) $y = \sec^2(5x)$

5) $xy = 1$

$$6) y^2 = \frac{x}{x+1}$$

$$7) xy + 2x + 3y = 1$$

$$8) x^3 - xy + y^3 = 1$$

$$9) y = \cot(2x)$$

$$10) \sin x + \cos y = 1$$

$$11) y = x^2 \cos(8x)$$
