

DATE: _____

Derivatives of Implicit Functions (Extra practice)

Find dy/dx.

$$1. \ 3x + y^2 = 4$$

$$2. \ 4x^3 + y = 5x$$

$$3. \ 4x^3 + y = 5y^2$$

$$4. \ xy + 2x = 7$$

$$5. \ 4x^2 + 2x + y^3 = 3$$

$$6. \ 4x^2 + xy + y^3 = 3$$

$$7. \ x^3y + 5x = 2y^2$$

Find dy/dx when $x = -2$

$$1. \ 5x + 3y^3 = 14$$

$$2. \ xy = 8$$

$$3. \ 4xy - x^2 = 4$$