Implicit Differentiation · 1

Find the slope of the curve $2x^2 + 2xy + 2y^2 - 2x - 2y = 4$ at the point $(0, -1)$.

Implicit Differentiation · 2

Find the equation of the tangent line to $xy - y^2 + x = 5$ at the point $(3, 2)$.

Implicit Differentiation · 3

Find the slope of the curve $y^2 = x^3 - 4x + 1$ at the point $(-1, 2)$.

Implicit Differentiation · 4

Find the slope of the curve $x^2y + xy^2 = 2$ at the point $(1, -2)$.

Implicit Differentiation · 5

Find the slope of the curve $3x^2 + xy - 2y^2 + x = -18$ at the point $(0, -3)$.

Implicit Differentiation · 6

Find the equation of the tangent line to $x^2 - 3xy - x + 4y = 38$ at the point $(-3, 2)$.

Implicit Differentiation · 7

Find the slope of the curve $x^2 - 9y^2 = -27$ at the point $(-3, -2)$.

Implicit Differentiation · 8

Find the equation of the tangent line to $3x^2 - 3xy + y^2 - 3x + 4y = 2$ at the point $(1, 1)$.

Implicit Differentiation · 2

ANSWER

$$y = 3x - 7$$

Implicit Differentiation · 1

ANSWER

$$\frac{2}{-3}$$

Implicit Differentiation · 4

ANSWER

$$0$$

Implicit Differentiation · 3

ANSWER

$$\frac{1}{-4}$$

Implicit Differentiation · 6

ANSWER

$$y = x + 5$$

Implicit Differentiation · 5

ANSWER

$$\frac{1}{6}$$

Implicit Differentiation · 8

ANSWER

$$y = 1$$

Implicit Differentiation · 7

ANSWER

$$\frac{1}{6}$$

Implicit Differentiation · 9

Find the slope of the curve $2x^2 - xy + 2y^2 - x + y = 6$ at the point (0, -2).

Implicit Differentiation · 10

Find the equation of the tangent line to $-2x^2 + 2xy - y^2 - 4x + y = 2$ at the point (-2, -1).

Implicit Differentiation · 11

Find the slope of the curve $y^2 = x^3 - 4x + 22$ at the point (-1, -5).

Implicit Differentiation · 12

Find the slope of the curve $x^2y + xy^2 = 6$ at the point (2, 1).

Implicit Differentiation · 13

Find the slope of the curve $-2x^2 - 3xy - 2y^2 + x - 4y = 6$ at the point (2, -3).

Implicit Differentiation · 14

Find the equation of the tangent line to $-x^2 + xy + 3y^2 + 2x - 4y = -3$ at the point (3, 0).

Implicit Differentiation · 15

Find the slope of the curve $3x^2 - 7y^2 = -60$ at the point (-1, 3).

Implicit Differentiation · 16

Find the slope of the curve $y^2 = x^3 + 3x$ at the point (1, -2).

Implicit Differentiation · 10

ANSWER

$$y = 2x + 3$$

Implicit Differentiation · 9

ANSWER

$$\frac{1}{7}$$

Implicit Differentiation · 12

ANSWER

$$\frac{5}{-8}$$

Implicit Differentiation · 11

ANSWER

$$\frac{1}{10}$$

Implicit Differentiation · 14

ANSWER

$$y = -4x + 12$$

Implicit Differentiation · 13

ANSWER

$$-1$$

Implicit Differentiation · 16

ANSWER

$$\frac{3}{-2}$$

Implicit Differentiation · 15

ANSWER

$$\frac{1}{-7}$$

Implicit Differentiation · 17

Find the slope of the curve $3x^2 - 3xy - 2y^2 + 3x - 2y = 6$ at the point (-2, 0).

Implicit Differentiation · 18

Find the equation of the tangent line to $-2x^2 + xy + 2y^2 - 3y = -2$ at the point (-1, 0).

Implicit Differentiation · 19

Find the slope of the curve $y^2 = x^3 + 4x - 12$ at the point (2, 2).

Implicit Differentiation · 20

Find the slope of the curve $x^2y + xy^2 = -12$ at the point (-3, -1).

Implicit Differentiation · 21

Find the slope of the curve $-x^2 + xy + 3y^2 + 3x - y = -3$ at the point (-1, 1).

Implicit Differentiation · 22

Find the equation of the tangent line to $-x^2 + 3xy + 2y^2 - x + 2y = 6$ at the point (-1, 2).

Implicit Differentiation · 23

Find the slope of the curve $7x^2 + y^2 = 67$ at the point (-3, -2).

Implicit Differentiation · 24

Find the slope of the curve $-x^2 - xy - 4x - 2y = -11$ at the point (1, 2).

Implicit Differentiation · 18

ANSWER

$$y = x + 1$$

Implicit Differentiation · 17

ANSWER

$$\frac{9}{4}$$

Implicit Differentiation · 20

ANSWER

$$\frac{7}{-15}$$

Implicit Differentiation · 19

ANSWER

$$4$$

Implicit Differentiation · 22

ANSWER

$$y = -x + 1$$

Implicit Differentiation · 21

ANSWER

$$\frac{3}{-2}$$

Implicit Differentiation · 24

ANSWER

$$\frac{8}{-3}$$

Implicit Differentiation · 23

ANSWER

$$\frac{21}{-2}$$