Slope & Equation of a Tangent Line · 1

Find the equation of the tangent line to $f(x) = -x^3 + 2x^2 + 3x + 2$ at the point P(2, 8).

Slope & Equation of a Tangent Line · 2

Find the equation of the tangent line to $f(x) = -x^3 + 3x^2 - 1$ at the point P(-3, 53).

Slope & Equation of a Tangent Line · 3

At what x-value is the tangent line to $f(x) = -x^2 - 12x + 3$ horizontal?

Slope & Equation of a Tangent Line · 4

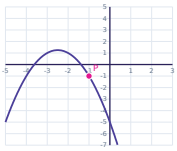
Find the slope of the tangent line to $f(x) = x^3 + 2x^2 + 4x - 2$ at $x = -3$.

Slope & Equation of a Tangent Line · 5

Find the slope of the normal line (perpendicular to the tangent) to $f(x) = -x^3 + 3x^2 - 4$ at $x = -2$.

Slope & Equation of a Tangent Line · 6

Find the equation of the tangent line to $f(x) = -x^2 - 5x - 5$ at the point P(-1, -1).



Slope & Equation of a Tangent Line · 7

Find the equation of the tangent line to $f(x) = -x^3 + 3x^2 - 5x + 2$ at the point P(-2, 32).

Slope & Equation of a Tangent Line · 8

Find the slope of the tangent line to $f(x) = x^3 - x^2 + x + 6$ at $x = 2$.

Slope & Equation of a Tangent Line · 2

ANSWER

$$y = -45x - 82$$

Slope & Equation of a Tangent Line · 1

ANSWER

$$y = -x + 10$$

Slope & Equation of a Tangent Line · 4

ANSWER

$$19$$

Slope & Equation of a Tangent Line · 3

ANSWER

$$x = -6$$

Slope & Equation of a Tangent Line · 6

ANSWER

$$y = -3x - 4$$

Slope & Equation of a Tangent Line · 5

ANSWER

$$\frac{1}{24}$$

Slope & Equation of a Tangent Line · 8

ANSWER

$$9$$

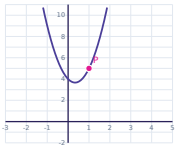
Slope & Equation of a Tangent Line · 7

ANSWER

$$y = -29x - 26$$

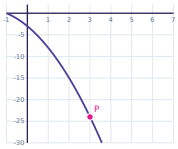
Slope & Equation of a Tangent Line · 9

Find the equation of the tangent line to f(x) = $3x^2 - 2x + 4$ at the point P(1, 5).



Slope & Equation of a Tangent Line · 10

Find the equation of the tangent line to f(x) = $-x^2 - 4x - 3$ at the point P(3, -24).

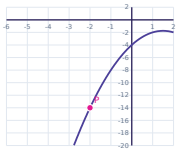


Slope & Equation of a Tangent Line · 11

At what x-value is the tangent line to f(x) = $2x^2 - 24x + 5$ horizontal?

Slope & Equation of a Tangent Line · 12

Find the slope of the tangent line to f(x) = $-x^2 + 3x - 4$ at x = -2.



Slope & Equation of a Tangent Line · 13

Find the slope of the tangent line to f(x) = $x^3 - x^2 - 5x + 3$ at x = -1.

Slope & Equation of a Tangent Line · 14

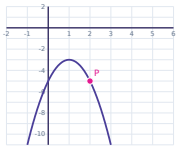
Find the slope of the normal line (perpendicular to the tangent) to f(x) = $-x^3 + x^2 + x + 4$ at x = -1.

Slope & Equation of a Tangent Line · 15

At what x-value is the tangent line to f(x) = $-2x^2 + 20x + 3$ horizontal?

Slope & Equation of a Tangent Line · 16

Find the equation of the tangent line to f(x) = $-2x^2 + 4x - 5$ at the point P(2, -5).



Slope & Equation of a Tangent Line · 10

ANSWER

$$y = -10x + 6$$

Slope & Equation of a Tangent Line · 9

ANSWER

$$y = 4x + 1$$

Slope & Equation of a Tangent Line · 12

ANSWER

$$7$$

Slope & Equation of a Tangent Line · 11

ANSWER

$$x = 6$$

Slope & Equation of a Tangent Line · 14

ANSWER

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

Slope & Equation of a Tangent Line · 13

ANSWER

$$0$$

Slope & Equation of a Tangent Line · 16

ANSWER

$$y = -4x + 3$$

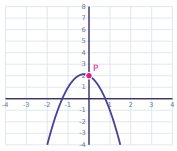
Slope & Equation of a Tangent Line · 15

ANSWER

$$x = 5$$

Slope & Equation of a Tangent Line · 17

Find the equation of the tangent line to f(x) = $-2x^2 - x + 2$ at the point P(0, 2).

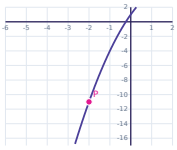


Slope & Equation of a Tangent Line · 18

At what x-value is the tangent line to f(x) = $2x^2 - 16x - 9$ horizontal?

Slope & Equation of a Tangent Line · 19

Find the slope of the tangent line to f(x) = $-x^2 + 4x + 1$ at x = -2.



Slope & Equation of a Tangent Line · 20

Find the slope of the normal line (perpendicular to the tangent) to f(x) = $x^3 - 2x^2 + 5x + 2$ at x = -1.

Slope & Equation of a Tangent Line · 21

Find the equation of the tangent line to f(x) = $x^3 + x^2 - 5x - 1$ at the point P(-3, -4).

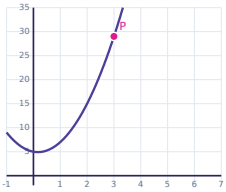
Slope & Equation of a Tangent Line · 22

Find the slope of the tangent line to f(x) = $3x^2 - 3x$ at x = -2.



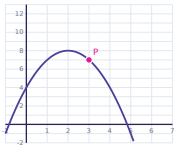
Slope & Equation of a Tangent Line · 23

Find the slope of the tangent line to f(x) = $3x^2 - x + 5$ at x = 3.



Slope & Equation of a Tangent Line · 24

Find the equation of the tangent line to f(x) = $-x^2 + 4x + 4$ at the point P(3, 7).



Slope & Equation of a Tangent Line · 18

ANSWER

$$x = 4$$

Slope & Equation of a Tangent Line · 17

ANSWER

$$y = -x + 2$$

Slope & Equation of a Tangent Line · 20

ANSWER

$$\frac{1}{-12}$$

Slope & Equation of a Tangent Line · 19

ANSWER

$$8$$

Slope & Equation of a Tangent Line · 22

ANSWER

$$-15$$

Slope & Equation of a Tangent Line · 21

ANSWER

$$y = 16x + 44$$

Slope & Equation of a Tangent Line · 24

ANSWER

$$y = -2x + 13$$

Slope & Equation of a Tangent Line · 23

ANSWER

$$17$$