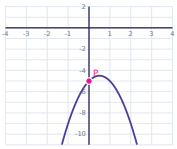
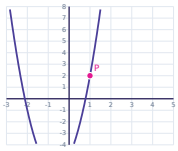
Slope & Equation of a Tangent Line · 1

Find the slope of the tangent line to $f(x) = -2x^2 + 2x - 5$ at $x = 0$.



Slope & Equation of a Tangent Line · 2

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

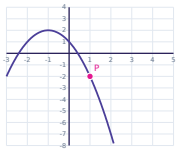


Slope & Equation of a Tangent Line · 3

At what x-value is the tangent line to $f(x) = 2x^2 + 8x - 7$ horizontal?

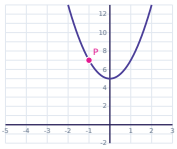
Slope & Equation of a Tangent Line · 4

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



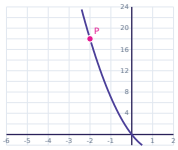
Slope & Equation of a Tangent Line · 5

Find the equation of the tangent line to $f(x) = 2x^2 + 5$ at the point $P(-1, 7)$.



Slope & Equation of a Tangent Line · 6

Find the equation of the tangent line to $f(x) = 2x^2 - 5x$ at the point $P(-2, 18)$.



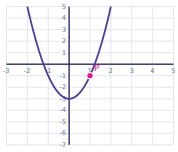
Slope & Equation of a Tangent Line · 7

Find the equation of the tangent line to $f(x) = x^2 + 4x + 2$ at the point $P(1, 7)$.



Slope & Equation of a Tangent Line · 8

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



Slope & Equation of a Tangent Line · 2

ANSWER

$y = 10x - 8$

Slope & Equation of a Tangent Line · 1

ANSWER

2

Slope & Equation of a Tangent Line · 4

ANSWER

$y = -4x + 2$

Slope & Equation of a Tangent Line · 3

ANSWER

$x = -2$

Slope & Equation of a Tangent Line · 6

ANSWER

$y = -13x - 8$

Slope & Equation of a Tangent Line · 5

ANSWER

$y = -4x + 3$

Slope & Equation of a Tangent Line · 8

ANSWER

$y = 4x - 5$

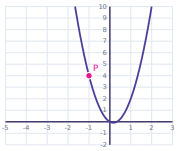
Slope & Equation of a Tangent Line · 7

ANSWER

$y = 6x + 1$

Slope & Equation of a Tangent Line · 9

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

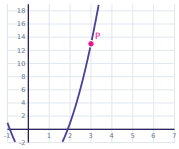


Slope & Equation of a Tangent Line · 10

At what x-value is the tangent line to f(x) = $2x^2 + 16x + 5$ horizontal?

Slope & Equation of a Tangent Line · 11

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

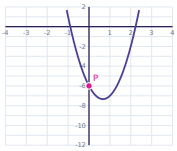


Slope & Equation of a Tangent Line · 12

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

Slope & Equation of a Tangent Line · 13

Find the equation of the tangent line to f(x) = $3x^2 - 4x - 6$ at the point P(0, -6).



Slope & Equation of a Tangent Line · 14

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

Slope & Equation of a Tangent Line · 15

Find the equation of the tangent line to f(x) = $-x^3 + x^2 - 2$ at the point P(-3, 34).

Slope & Equation of a Tangent Line · 16

At what x-value is the tangent line to f(x) = $-2x^2 + 20x + 6$ horizontal?

Slope & Equation of a Tangent Line · 10

ANSWER

$x = -4$

Slope & Equation of a Tangent Line · 9

ANSWER

$y = -7x - 3$

Slope & Equation of a Tangent Line · 12

ANSWER

18

Slope & Equation of a Tangent Line · 11

ANSWER

15

Slope & Equation of a Tangent Line · 14

ANSWER

$y = 3x - 2$

Slope & Equation of a Tangent Line · 13

ANSWER

$y = -4x - 6$

Slope & Equation of a Tangent Line · 16

ANSWER

$x = 5$

Slope & Equation of a Tangent Line · 15

ANSWER

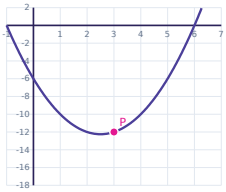
$y = -33x - 65$

Slope & Equation of a Tangent Line · 17

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

Slope & Equation of a Tangent Line · 18

Find the slope of the tangent line to $f(x) = x^2 - 5x - 6$ at $x = 3$.



Slope & Equation of a Tangent Line · 19

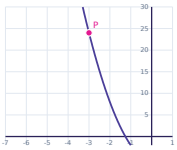
At what x-value is the tangent line to $f(x) = -x^2 + 4x - 7$ horizontal?

Slope & Equation of a Tangent Line · 20

Find the equation of the tangent line to $f(x) = x^3 + 2x^2 - 5x - 4$ at the point P(0, -4).

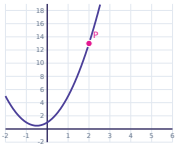
Slope & Equation of a Tangent Line · 21

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



Slope & Equation of a Tangent Line · 22

Find the equation of the tangent line to $f(x) = 2x^2 + 2x + 1$ at the point P(2, 13).



Slope & Equation of a Tangent Line · 23

At what x-value is the tangent line to $f(x) = 3x^2 - 6x + 1$ horizontal?

Slope & Equation of a Tangent Line · 24

Find the equation of the tangent line to $f(x) = -x^2 + 5x - 3$ at the point P(-2, -17).



Slope & Equation of a Tangent Line · 18

ANSWER

1

Slope & Equation of a Tangent Line · 17

ANSWER

45

Slope & Equation of a Tangent Line · 20

ANSWER

y = -5x - 4

Slope & Equation of a Tangent Line · 19

ANSWER

x = 2

Slope & Equation of a Tangent Line · 22

ANSWER

y = 10x - 7

Slope & Equation of a Tangent Line · 21

ANSWER

-19

Slope & Equation of a Tangent Line · 24

ANSWER

y = 9x + 1

Slope & Equation of a Tangent Line · 23

ANSWER

x = 1