Parametric Equations · 1

Eliminate the parameter: $x = t + 5$, $y = t^2 - 2$. Write the answer in the form $y = a(x - h)^2 + k$.

Parametric Equations · 2

Eliminate the parameter: $x = 5 \cos t$, $y = 5 \sin t$. Write the answer in the form $x^2 + y^2 = c$.

Parametric Equations · 3

A football is punted. After t seconds its position in meters is $x = 30t$, $y = 50t - 5t^2$. What is its maximum height, in meters?

Parametric Equations · 4

Eliminate the parameter: $x = 2t + 5$, $y = -12t + 6$. Write the answer in the form $y = mx + b$.

Parametric Equations · 5

A rocket is launched. After t seconds its position in meters is $x = 17t$, $y = 50t - 5t^2$. How many meters from its starting point does it land?

Parametric Equations · 6

$x = 2t + 6$, $y = -t^2 - 3t + 3$. For which value of t is the curve at the point (2, 5)?

Parametric Equations · 7

A football is punted. After t seconds its position in meters is $x = 12t$, $y = 10t - 5t^2$. Find its position (x, y) when $t = 1$.

Parametric Equations · 8

Eliminate the parameter: $x = t + 3$, $y = 2t^2 + 6$. Write the answer in the form $y = a(x - h)^2 + k$.

Parametric Equations · 2

ANSWER

$x^2 + y^2 = 25$

Parametric Equations · 1

ANSWER

$y = (x - 5)^2 - 2$

Parametric Equations · 4

ANSWER

$y = -6x + 36$

Parametric Equations · 3

ANSWER

125

Parametric Equations · 6

ANSWER

$t = -2$

Parametric Equations · 5

ANSWER

170

Parametric Equations · 8

ANSWER

$y = 2(x - 3)^2 + 6$

Parametric Equations · 7

ANSWER

(12, 5)

Parametric Equations · 9

Eliminate the parameter: $x = t + 1$, $y = t^2 - 9$. Write the answer in the form $y = a(x - h)^2 + k$.

Parametric Equations · 10

Eliminate the parameter: $x = 11 \cos t$, $y = 11 \sin t$. Write the answer in the form $x^2 + y^2 = c$.

Parametric Equations · 11

A ball is kicked. After t seconds its position in meters is $x = 28t$, $y = 10t - 5t^2$. What is its maximum height, in meters?

Parametric Equations · 12

Eliminate the parameter: $x = -t + 2$, $y = 5t$. Write the answer in the form $y = mx + b$.

Parametric Equations · 13

A stone is thrown. After t seconds its position in meters is $x = 17t$, $y = 40t - 5t^2$. How many meters from its starting point does it land?

Parametric Equations · 14

$x = -4t + 2$, $y = t + 9$. For which value of t is the curve at the point $(2, 9)$?

Parametric Equations · 15

A ball is kicked. After t seconds its position in meters is $x = 11t$, $y = 50t - 5t^2$. Find its position (x, y) when $t = 7$.

Parametric Equations · 16

Eliminate the parameter: $x = t - 3$, $y = 2t^2 - 7$. Write the answer in the form $y = a(x - h)^2 + k$.

Parametric Equations · 10

ANSWER

$x^2 + y^2 = 121$

Parametric Equations · 9

ANSWER

$y = (x - 1)^2 - 9$

Parametric Equations · 12

ANSWER

$y = -5x + 10$

Parametric Equations · 11

ANSWER

5

Parametric Equations · 14

ANSWER

$t = 0$

Parametric Equations · 13

ANSWER

136

Parametric Equations · 16

ANSWER

$y = 2(x + 3)^2 - 7$

Parametric Equations · 15

ANSWER

$(77, 105)$

Parametric Equations · 17

Eliminate the parameter: $x = t + 7$, $y = 2t^2 - 2$. Write the answer in the form $y = a(x - h)^2 + k$.

Parametric Equations · 18

Eliminate the parameter: $x = 6 \cos t$, $y = 6 \sin t$. Write the answer in the form $x^2 + y^2 = c$.

Parametric Equations · 19

A ball is kicked. After t seconds its position in meters is $x = 21t$, $y = 20t - 5t^2$. What is its maximum height, in meters?

Parametric Equations · 20

Eliminate the parameter: $x = -t + 3$, $y = -4t + 8$. Write the answer in the form $y = mx + b$.

Parametric Equations · 21

A football is punted. After t seconds its position in meters is $x = 11t$, $y = 20t - 5t^2$. How many meters from its starting point does it land?

Parametric Equations · 22

$x = -t + 4$, $y = t^2 + 8t + 7$. For which value of t is the curve at the point $(7, -8)$?

Parametric Equations · 23

A rocket is launched. After t seconds its position in meters is $x = 20t$, $y = 50t - 5t^2$. Find its position (x, y) when $t = 3$.

Parametric Equations · 24

Eliminate the parameter: $x = t + 3$, $y = -2t^2 + 8$. Write the answer in the form $y = a(x - h)^2 + k$.

Parametric Equations · 18

ANSWER

$x^2 + y^2 = 36$

Parametric Equations · 17

ANSWER

$y = 2(x - 7)^2 - 2$

Parametric Equations · 20

ANSWER

$y = 4x - 4$

Parametric Equations · 19

ANSWER

20

Parametric Equations · 22

ANSWER

$t = -3$

Parametric Equations · 21

ANSWER

44

Parametric Equations · 24

ANSWER

$y = -2(x - 3)^2 + 8$

Parametric Equations · 23

ANSWER

(60, 105)