Task card 1 Parametric Equations

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

Task card 2 Parametric Equations

$x = -5t + 7$, $y = t^2 + 7t + 2$. Find the point on the curve when $t = 4$.

Task card 3 Parametric Equations

A stone is thrown. After t seconds its position in meters is $x = 26t$, $y = 40t - 5t^2$. Find its position (x, y) when $t = 6$.

Task card 4 Parametric Equations

Eliminate the parameter: $x = t + 6$, $y = t^2 + 8$. Write the answer in the form $y = a(x - h)^2 + k$.

Task card 5 Parametric Equations

$x = t + 6$, $y = -6t - 6$. For which value of t is the curve at the point (12, -42)?

Task card 6 Parametric Equations

A football is punted. After t seconds its position in meters is $x = 26t$, $y = 10t - 5t^2$. After how many seconds does it hit the ground ($y = 0$)?

Task card 7 Parametric Equations

Eliminate the parameter: $x = t + 5$, $y = -2t + 4$. Write the answer in the form $y = mx + b$.

Task card 8 Parametric Equations

$x = -3t - 7$, $y = -6t$. Find the point on the curve when $t = -2$.

Task card 9 Parametric Equations

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

Task card 10 Parametric Equations

A football is punted. After t seconds its position in meters is $x = 11t$, $y = 30t - 5t^2$. After how many seconds does it hit the ground ($y = 0$)?

Task card 11 Parametric Equations

Eliminate the parameter: $x = -t - 4$, $y = -t + 1$. Write the answer in the form $y = mx + b$.

Task card 12 Parametric Equations

A ball is kicked. After t seconds its position in meters is $x = 27t$, $y = 20t - 5t^2$. What is its maximum height, in meters?

Task card 13 Parametric Equations

$x = 4t - 2$, $y = t^2 - 3t - 6$. Find the point on the curve when $t = 0$.

Task card 14 Parametric Equations

A golf ball is hit. After t seconds its position in meters is $x = 19t$, $y = 30t - 5t^2$. How many meters from its starting point does it land?

Task card 15 Parametric Equations

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

Task card 16 Parametric Equations

A ball is kicked. After t seconds its position in meters is $x = 7t$, $y = 10t - 5t^2$. After how many seconds does it hit the ground ($y = 0$)?

Task card 17 Parametric Equations

Eliminate the parameter: $x = t - 5$, $y = t^2 + 8$. Write the answer in the form $y = a(x - h)^2 + k$.

Task card 18 Parametric Equations

A golf ball is hit. After t seconds its position in meters is $x = 24t$, $y = 50t - 5t^2$. After how many seconds does it hit the ground ($y = 0$)?

Task card 19 Parametric Equations

Eliminate the parameter: $x = -t + 4$, $y = 5t - 4$. Write the answer in the form $y = mx + b$.

Task card 20 Parametric Equations

A stone is thrown. After t seconds its position in meters is $x = 29t$, $y = 10t - 5t^2$. What is its maximum height, in meters?

Task card 21 Parametric Equations

$x = 2t - 3$, $y = t^2 + 2t + 7$. Find the point on the curve when $t = 0$.

Task card 22 Parametric Equations

A stone is thrown. After t seconds its position in meters is $x = 9t$, $y = 40t - 5t^2$. How many meters from its starting point does it land?

Task card 23 Parametric Equations

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

Task card 24 Parametric Equations

A rocket is launched. After t seconds its position in meters is $x = 23t$, $y = 10t - 5t^2$. After how many seconds does it hit the ground ($y = 0$)?

Parametric Equations Task Cards

Recording sheet · Grade 12 · Write points as (x, y) and equations in the form asked for, typing ^ for powers, like y = (x - 2)^2 + 1.

Scan to check your answers

Name: _____ Date: _____

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Parametric Equations Task Cards: Answer Key

Grade 12 · Medium

The answers online

1. $y = -6x + 28$	**2.** $(-13, 46)$	**3.** $(156, 60)$
4. $y = (x - 6)^2 + 8$	**5.** $t = 6$	**6.** 2
7. $y = -2x + 14$	**8.** $(-1, 12)$	**9.** $y = (x + 2)^2 + 8$
10. 6	**11.** $y = x + 5$	**12.** 20
13. $(-2, -6)$	**14.** 114	**15.** $y = (x + 3)^2 - 3$
16. 2	**17.** $y = (x + 5)^2 + 8$	**18.** 10
19. $y = -5x + 16$	**20.** 5	**21.** $(-3, 7)$
22. 72	**23.** $y = (x + 3)^2 + 8$	**24.** 2