

$y = x^2 + 121404x$, if $x = 3$, what is y ?

ChatGPT said:

ChatGPT

To find y when $x=3$ in the equation $y=x^2+121404x$, we can substitute x with 3:

$$y=(3)^2+121404(3)y=(3)^2+121404(3)y=9+364212y=9+364212y=364221y=364221$$

So, $y=364221$.

4o mini

You said:

now do $x = 6$

ChatGPT said:

ChatGPT

To find y when $x=6$ in the equation $y=x^2+121404x$, we substitute x with 6:

$$y=(6)^2+121404(6)y=(6)^2+121404(6)y=36+728424y=36+728424y=728460y=728460$$

So, $y=728460$.

4o mini

You said:

now do $x=9$

ChatGPT said:

ChatGPT

To find y when $x=9$ in the equation $y=x^2+121404x$, we substitute x with 9:

$$y=(9)^2+121404(9)y=(9)^2+121404(9)y=81+1092636y=81+1092636y=1092717y=1092717$$

So, $y=1092717$.

4o mini

You said:

now do $x=1$

ChatGPT said:

ChatGPT

To find y when $x=1$ in the equation $y=x^2+121404x$, we substitute x with 1:

$$y=(1)^2+121404(1)=1+121404=121405$$

So, $y=121405$.

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You said:

With the knowledge that Jake only has \$400 dollars in his pocket. He earns \$20 an hour for 10 hours each day and works everyday for 20 years. How much money would he have if he spent only about \$10000 a year.

ChatGPT said:

ChatGPT

To calculate how much money Jake would have after 20 years, let's break it down step by step.

1. Daily Earnings:

Daily Earnings = 20 dollars/hour × 10 hours/day = 200 dollars/day
Earnings = 200 dollars/hour × 10 hours/day = 200 dollars/day

2. Annual Earnings:

Annual Earnings = 200 dollars/day × 365 days/year = 73,000 dollars/year
Earnings = 200 dollars/day × 365 days/year = 73,000 dollars/year

3. Total Earnings Over 20 Years:

Total Earnings = 73,000 dollars/year × 20 years = 1,460,000 dollars
Earnings = 73,000 dollars/year × 20 years = 1,460,000 dollars

4. Total Spending Over 20 Years:

Total Spending = 10,000 dollars/year × 20 years = 200,000 dollars
Spending = 10,000 dollars/year × 20 years = 200,000 dollars

5. Net Amount After 20 Years:

Net Amount = Total Earnings - Total Spending + Initial Amount
Net Amount = Total Earnings - Total Spending + Initial Amount
Amount = 1,460,000 dollars - 200,000 dollars + 400 dollars
Net Amount = 1,260,400 dollars

So, after 20 years, Jake would have **\$1,260,400**.

4o mini

You said:

Paul won the lottery one day. He earned \$7.5 million dollars after tax. He already had \$20,000 saved from his job, which he quit after winning. Paul is a major spender, getting a house for \$5 million and a car for \$1 million. Afterwards, his lifestyle would have him spend about \$1,000 each day for 20 years. How much money left does he have?

ChatGPT said:

ChatGPT

Let's break down Paul's finances step by step.

1. **Initial Amount:**

- Lottery winnings: \$7,500,000
- Savings: \$20,000
- Total initial amount:

2. $7,500,000 + 20,000 = 7,520,000$

3. **Expenses:**

- House: \$5,000,000
- Car: \$1,000,000
- Total expenses:

4. $5,000,000 + 1,000,000 = 6,000,000$

5. **Amount After Purchases:**

$7,520,000 - 6,000,000 = 1,520,000$

6. **Daily Spending:**

- Daily spending: \$1,000
- Annual spending:

7. $1,000 \times 365 = 365,000$

- Total spending over 20 years:

8. $365,000 \times 20 = 7,300,000$

9. **Final Amount:**

$1,520,000 - 7,300,000 = -5,780,000$

So, after 20 years of spending at that rate, Paul would be in debt by **\$5,780,000**.