

Name: _____
AP Precalculus Summer Work



2024-2025

Rising 12th Grade Summer Math Packet

Hi rising Seniors! Hope you are having a great summer so far! I put together just a few review questions for you before we jump into AP Precalculus! All of this content is a review from things you have learned in your high school years and they are skills that will help us in AP Precalculus this year!

Directions:

- Complete all pages of the attached packet.
- Show **all** of your work. Try to work without a calculator.
- You can get help from friends, family, or other sources, but do **not** use ChatGPT or PhotoMath. It's important that **you** understand the work because **you** need to understand this math for 12th grade.

Name: _____

AP Precalculus Summer Work

1. Round 4.857626 to the nearest thousandth (three decimal places)

2. Round 0.646399 to the nearest thousandth (three decimal places)

3. Factor $6x-18$

4. Solve for x: $25x - 17 = 33$

5. For this question I give you an example and you should fill in the one below it!

<u>EXAMPLE</u> <u>Expression:</u>	$-4x^2 - 2x + 7$		
<u>Terms</u>	$-4x^2$	$-2x$	7
<u>Coefficients</u>	-4	-2	
<u>Constants</u>			7

Name: _____

AP Precalculus Summer Work

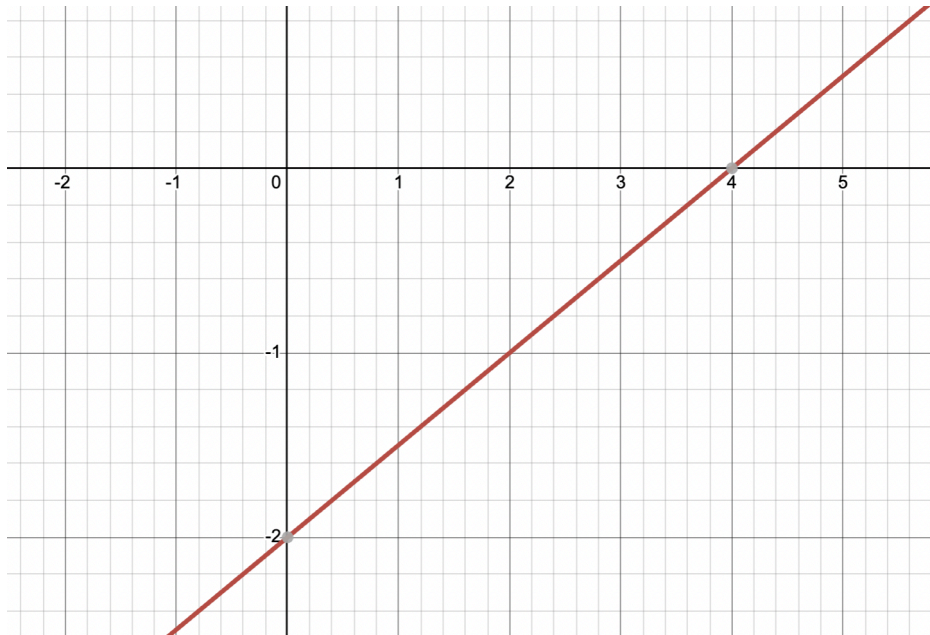
Expression:	$7x^3 - 2x^2 + 9x - 15$			
Terms				
Coefficients				
Constants				

6. Find the slope (also called rate of change) from this table, remember slope (rate of

change) is found by: $\frac{y_2 - y_1}{x_2 - x_1}$. This is just the change in y divided by the change in x!

x	y
1	-7
2	-4
3	-1
4	2

7. Find the slope and the y-intercept (where the line crosses the y-axis) of this line



Name: _____

AP Precalculus Summer Work

8. Factor this Polynomial: $x^2 - 5x + 6$ If you need help watch this [video](#)

9. Factor this polynomial: $x^2 + 7x + 10$

10. Given the function $f(x) = 5x^2 - 2x + 1$

a. Solve for $f(5)$ Hint: Plug in 3 wherever you see an x and Simplify!

b. Solve for $f(-2)$ Hint: Plug in 3 wherever you see an x and Simplify!