

Summer Packet for Students entering Geometry CP and Level 2 Due: Friday, August 28, 2026

Name: _____

This packet contains topics you have learned in previous courses that are most important to know for this class. Please read the directions and **show your work** for each problem. Then write your answers on the answer sheet

I. Use Order of Operations to simplify each expression.

1. $16 - 2(4 + 1) + 5$

2. $(2 + 3)^2 + (6 - (-3))^2$

II. Write the answer:

1. $(-3)(-4) =$ _____

2. $5 - 18 =$ _____

3. $-\frac{3}{9} =$ _____

4. $-24 + 17 =$ _____

5. $-2(5x - 8) =$ _____

6. $-8 - (-1) =$ _____

III. Solve the equation for x. Remember to show your work!

1. $6x + 30 = 18$

2. $2x + 5 = 6x - 23$

3. $3(x - 12) = -24$

4. $5 + \frac{2}{3}(x+1) = 7$

IV. Factor

1. $6x + 10$

2. $x^2 - 9$

3. $x^2 - 10x + 21$

4. $6x^2 + 11x - 10$

V. Factor and solve each quadratic equation. Remember to show your work!

1. $x^2 + 6x + 8 = 0$

2. $x^2 - 5x = 24$

VI. Simplify the radical. Write the answer as a reduce radical.

1. $\sqrt{36}$

2. $\sqrt{100}$

3. $\sqrt{8}$

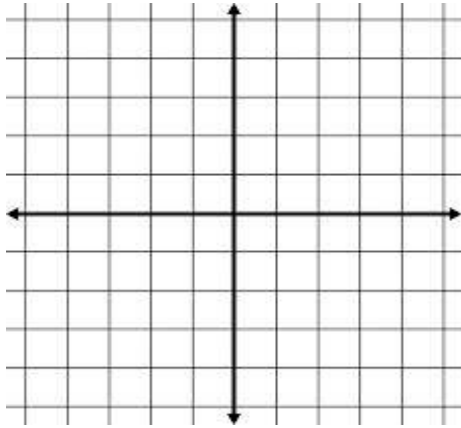
4. $\sqrt{27}$

5. $5\sqrt{12}$

6. $4\sqrt{18}$

VII. Plot and label (using the letter) each ordered pair on the graph:

A (1, -3) B (-2, 5) C (0, 4) D (-3, 0)



VIII. Find the slope and y-intercept:

1. $2y = 6x - 2$

2. $3x + 4y = 1$

Slope = _____ y-intercept = _____

slope = _____ y-intercept = _____

Name: _____

I Use Order of operations to simplify each expression

1. _____

2. _____

II. Write the answer

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

III. Solve the equation for x

1. _____

2. _____

3. _____

4. _____

IV. Factor

1. _____

2. _____

3. _____

4. _____

V. Factor and solve each quadratic equation

1. _____

2. _____

VI. Simplify the radical

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

VII. Plot and Label – DO THE WORK ON THE GRAPH

VIII. Find the slope and y-intercept

1. Slope = _____ y-intercept = _____

2. Slope = _____ y-intercept = _____