

Clifton High School Mathematics Summer Workbook

Geometry H

Completion of this summer work is required on the first day of the school year.

Date Received: _____

Date Completed: _____

Student Signature: _____

Parent Signature: _____

Dear Parents and Guardians,

Attached is the mathematics workbook that your child is required to work on over the summer. Our goal is that your child will continue to work on appropriate math skills and concepts to maintain the progress made during the previous grade. This packet will also help prepare your child for the next level.

Each child entering grades 9 through 11 is receiving a packet. If your child did not receive a packet, it can be accessed online through the Clifton web site:

- <http://www.clifton.k12.nj.us/cliftonhs/index.html>
- click on: mathematics summer workbooks

Please sign to indicate the date the packet was received and the date it was completed. Encourage your child to work through the booklet a section at a time during July and August.

Your child's math teacher will collect the packet during the first week of school. Giving time and thought to the work in this packet will help to maximize your child's grade on the test given in September. The test will be based on the work in the packet and will count as the first test of the school year. The grade will be determined as follows:

- Completion of the packet on time will count as 20% of the grade.
- Performance on the test will count as 80% of the grade.

Thank you for your cooperation in this matter.

Sincerely,

Michael Doktor
Principal

Mary Campbell
Supervisor of Mathematics 9-12

Summer Assignment: Geometry H

Please show all of your work NEATLY on these papers.

#1 – 4: Write the radicals in simplest radical form (no decimals)

1) $\sqrt{80}$	2) $\sqrt{243}$
3) $\sqrt{50} * \sqrt{10}$	4) $\sqrt{6} * \sqrt{6}$

#5 – 6: Multiply each polynomial

5) $8y^2(5y^3 - 2y + 1)$	6) $(a + 3)(a - 6)$
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#7 – 8: Factor and solve using the Quadratic Formula

7) $x^2 + 5x + 4 = 0$	8) $4x^2 + 8x + 2 = 0$
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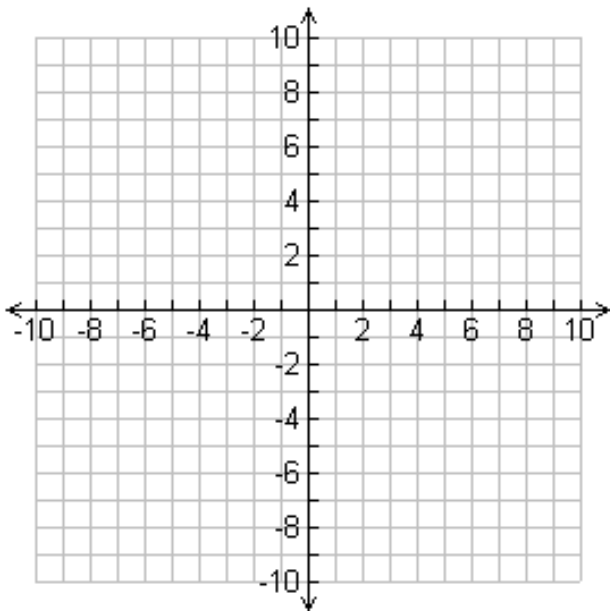
#9 – 10: Factor and solve using the Zero Product Property

9) $x^2 - 10x - 24 = 0$

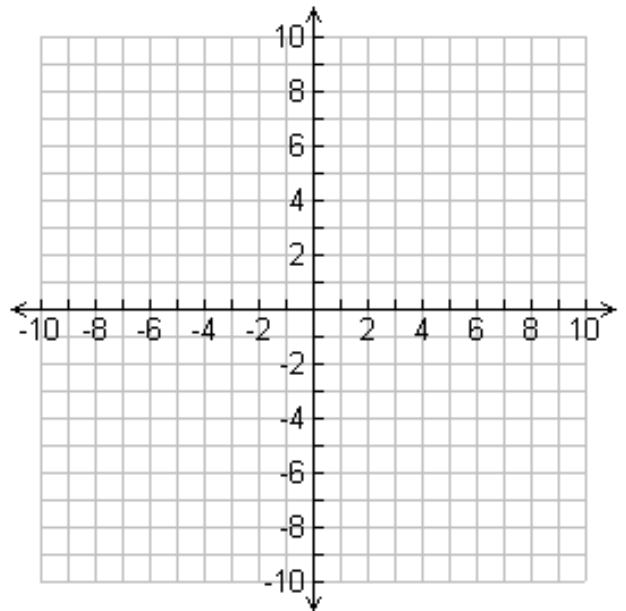
10) $24x - 35 = 4x^2$

#11 – 12: Graph each linear equation

11) $y = -2x + 3$



12) $2y - x = -2$



#13 – 14: Write an equation in slope-intercept form for each line

13) $m = -4$ through $(0, 3)$

14) through $(-5, -3)$ and $(10, -6)$

#15 – 18: Algebra Review: *The skills represented are crucial to your success in this class. You will be asked to recall and apply these skills throughout the year. Complete each problem by showing all work neatly. Circle your final solution, Write your final answer as a fraction if necessary.*

15) $2x + 5 = 11$

16) $x - 3(x - 7) = 4(x - 7) - 2x$

17) $3x - 4(x - 4) + 4 = 13$

18) $12x + 8 = 6x - 5$

#19 – 22: Algebra Review: *The skills represented are crucial to your success in this class. You will be asked to recall and apply these skills throughout the year. Complete each problem by showing all work neatly. Circle your final solution, Write your final answer as a fraction if necessary.*

19) $(6x - 8) - (5x + 9) = 3$

20) $7x - 8x + 4 = 5x - 2$

21) $\frac{x+2}{3} = \frac{8}{15}$

22) $\frac{5}{7} = \frac{10}{x+2}$

#23 – 26: Solve each inequality

23) $4x + 23 \leq -13$

24) $(\frac{8}{3})x + 1 > -5$

25) $-3x < 48$

26) $-3x + 1 \leq 8$

#27 – 28: Solve each system of equations using elimination. Write the solution as an ordered pair, using fractions if necessary.

27) $2x - 3y = 2$
 $5x - 3y = 14$

28) $11x - 3y = -39$
 $6x + 12y = -19$

#29 – 30: Solve each system of equations using substitution. Write the solution as an ordered pair, using fractions if necessary.

29) $2x + y = 21$
 $7x - 2y = 90$

30) $2x - 4y = 40$
 $8x - 3y = 82$