

Algebra 1 Honors Packet

This packet has 36 questions on topics you have covered in previous math classes. You are expected to understand these concepts coming into Algebra 1.

The packet will be due the end of the first week of school. This gives you plenty of time to complete the packet and ask any questions you may have. It will be collected for a grade. This material will also be included on the first test during the second week of school. You **will not** be allowed to use a calculator during the assessment for this material so please make sure you understand how to do the problems **without** a calculator.

WHO: All Algebra 1-H students

WHAT: Packet on concepts you **NEED** to know coming into Algebra H

WHEN: Due at the end of the first week of school (for a grade)

HOW: Get all your questions answered after school or during lunch before you have to hand it in

WHY: These are fundamental skills you need in order to be successful in Algebra I. You will be quizzed on all the concepts.

Name: _____

Teacher last year: _____

SHOW ALL WORK NEEDED TO ANSWER EACH QUESTION!

PLEASE CIRCLE YOUR FINAL ANSWER! GOOD LUCK! 😊

1.

$$\frac{2}{3} + \frac{3}{4} =$$

2.

$$\frac{2}{3} - \frac{3}{4} =$$

3.

$$\frac{2}{3} \times \frac{3}{4} =$$

4.

$$\frac{2}{3} \div \frac{3}{4} =$$

5.

Change $4\frac{3}{7}$ into an improper fraction.

6.

Change $\frac{12}{5}$ into a mixed number.

7.

$$2\frac{1}{4} \times 3\frac{1}{3} =$$

8.

$$\frac{2}{3} \times 15 =$$

9.

$$6\frac{1}{2} \div 2\frac{1}{4} =$$

10.

$$1\frac{4}{7} \cdot \left(\frac{-2}{3}\right) =$$

11.

$$-8(4 - 7 + 2) + 16 =$$

12.

$$-5(-3)^2 =$$

13.

$$4 \cdot -6^2 =$$

14.

$$48 \div 16 \cdot (-2 + 4) =$$

<p>15.</p> <p>Simplify:</p> $6d - 7g - 8 + 9g + 3d =$	<p>16.</p> <p>Simplify:</p> $6a - 1 + 2a =$
<p>17.</p> <p>Simplify:</p> $6y - 6x + (-2x) - (-x) =$	<p>18.</p> <p>Solve:</p> $4x - 5 = 23$
<p>19.</p> <p>Solve:</p> $\frac{a}{3} - 2 = 16$	<p>20.</p> <p>Solve:</p> $10 - n = 15$
<p>21.</p> <p>What is the solution to $6 - \frac{x}{2} = 10$?</p>	<p>For 22 – 27, Write an algebraic expression, equation, or inequality for each of the following verbal sentences.</p> <p>22. A number increased by three is at most -7.</p>

<p>23.</p> <p>Thirteen less than half a number is equal to 80.</p>	<p>24.</p> <p>Three times the sum of a number and five exceeds forty.</p>
<p>25.</p> <p>The quotient of a number and four is at least 45.</p>	<p>26. On the 4th of July weekend, Mandy gets paid \$12 each hour for babysitting and she is promised a \$20 bonus. Write an equation to model the scenario, where h represents hours, and t represents the total amount of money she makes.</p>
<p>27. The Totally Awesome Math Society is having a bake sale and will be selling brownies for \$2 each and homemade miniature pies for \$3 each. At the end of the sale, they made \$65. Write an equation that models this scenario. Let b represent the number of brownies sold, and p represent the number of pies sold.</p>	<p>28.</p> <p>Solve:</p> $\frac{2}{3}x = 8$
<p>29.</p> <p>Solve:</p> $1\frac{2}{3}x = 8$	<p>30.</p> <p>What is the solution to $3x + \frac{1}{4} = 4$?</p>

31.
Solve:
 $\frac{3}{4}c + 6 + 18 =$

32.
Solve:
 $4x - 1 = 5\frac{1}{4}$

For 33 -36, complete each of the following problems WITHOUT a calculator.

33.
 $-8 + 5 =$

34.
In a series of plays, the Clemson Tigers made 17, 3, -6, 32 and -11 yards. What was the football team's total gain or loss?

35.
Order the following from least to greatest:
2, -1, -4, 0, 3, -6

36.
Evaluate $-4 \cdot -1 \cdot -5 =$