

# CINCINNATI COUNTRY DAY SCHOOL

## SUMMER ALGEBRA II REVIEW

### Summer Algebra II Review Problem Set

Please print and staple a hard copy of this document. Complete all the problems in this document to the best of your ability. You will turn this in at the start of the first Algebra II class of the year. Electronic copies will not be accepted. All work is to be done in this document and all answers are to be copied onto the answer sheets. Be sure to show all appropriate work because in Algebra II, the solution is more important than the answer. Calculators may not be used on the summer work, but a **TI-84 graphing calculator will be required for this class.**

While we recognize you have had more advanced math than the material in this packet, it is important to know that this material is expected knowledge going into Algebra II. This packet is worth 20 points (10 homework assignments) and will be graded on neatness and completeness. Getting a problem wrong will not hurt your grade on this document, not showing appropriate work will. Deductions will be as follows:

- Late, but still the first day of school: -10 points
- Each successive day it is late: -2 points
- Incomplete: -10 points
- Appropriate work not shown: -5 points
- Illegible work: -8 points
- Messy work: -5 points

While this project will be graded on neatness and completeness, if you score below a 90% you will be required to take biweekly multiple-choice assessments until you demonstrate mastery of the topics presented on three consecutive assessments. These assessments will not per-se be calculated into your academic mark, but until you demonstrate mastery of these fundamental topics you cannot earn higher than an academic mark of B- for any marking period (interims, quarters, semesters, and so forth).

For practice purposes, each topic has a link to an online worksheet or two with answers. These, and many other topics, are from [www.kutasoftware.com](http://www.kutasoftware.com), a free online resource. For remediation purposes, each topic has a review screencast linked in this document. Additional remediation resources are the responsibility of the student and the family. If you have any questions about the format of this packet, please contact Mr. Greg Faulhaber, PK-12 Mathematics Department Chair, at [faulhabeg@countryday.net](mailto:faulhabeg@countryday.net).

Name: \_\_\_\_\_

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## SUMMER ALGEBRA II REVIEW

Topic: Operations with positive and negative integers.

For problems 1 – 8: Simplify the expressions

[Review Screencast 1](#)

[Practice Document 1](#)

1)  $3 - (-4)$

2)  $(-3)(-17)$

[Practice Document 2](#)

3)  $32 \div -8$

4)  $-6 + (-13)$

5)  $-45 \div -9$

6)  $(-7)(4)$

7)  $-6 - (-18)$

8)  $4 + 91$

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## SUMMER ALGEBRA II REVIEW

Topic: Operations with fractions.

For problems 9-24, simplify the expressions.

[Review Screencast 2](#) [Practice Document 3](#)

9)  $\frac{2}{5} - \frac{6}{5}$

10)  $\frac{11}{3} + \frac{7}{3}$

[Practice Document 4](#)

11)  $\frac{3}{4} \times \frac{2}{4}$

12)  $\frac{6}{7} \div \frac{5}{7}$

13)  $\frac{2}{3} - \frac{7}{4}$

14)  $\frac{3}{4} + \frac{1}{5}$

15)  $\frac{3}{5} \div \frac{6}{7}$

16)  $\frac{7}{2} \times \frac{5}{9}$

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$$17) \left(-\frac{2}{3}\right) + \frac{5}{4}$$

$$18) \frac{6}{5} - \left(-\frac{3}{4}\right)$$

$$19) \frac{3}{8} \times \left(-\frac{4}{3}\right)$$

$$20) \left(-\frac{3}{7}\right) \div \frac{2}{3}$$

$$21) \left(-\frac{8}{3}\right) + \left(-\frac{2}{5}\right)$$

$$22) \left(-\frac{1}{4}\right) - \left(-\frac{5}{6}\right)$$

$$23) \left(-\frac{6}{7}\right) \times \left(-\frac{5}{2}\right)$$

$$24) \left(-\frac{9}{5}\right) \div \left(-\frac{4}{7}\right)$$

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### Topic: Order of Operations

For problems 25-28, simplify the expressions.

[Review Screencast 3](#) [Practice Document 5](#)

25)  $3 + 8 \div 4$

26)  $5(-5 + 6) \times 6^2$

27)  $4 - 2|3^2 - 16|$

28)  $2 \times 4 + 6 - 6 \div 2$

### Topic: Solving Equations

For problems 29 -36, solve for x.

[Review Screencast 4](#) [Practice Document 6](#)

29)  $2x + 4 = 9$

30)  $-8 = \frac{x}{5} - 6$  [Practice Document 7](#)

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$$31) 2 - (-3x - 8) = 1$$

$$32) -16x + 12 = 39 - 7x$$

$$33) -4(x + 1) = 2x - 8(5 + 3x)$$

$$34) \frac{3}{4}x - \frac{7}{2} = \frac{5}{6}$$

$$35) \frac{3}{2} \left( \frac{5}{9}x + \frac{4}{27} \right) = 3$$

$$36) \frac{rs}{x-3} = t$$

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### Algebra II Summer Review Problem Set Answer Sheet.

(Bold numbers indicate end of a topic)

- |                 |           |                  |                  |
|-----------------|-----------|------------------|------------------|
| 1) _____        | 10) _____ | 19) _____        | <b>28)</b> _____ |
| 2) _____        | 11) _____ | 20) _____        | 29) _____        |
| 3) _____        | 12) _____ | 21) _____        | 30) _____        |
| 4) _____        | 13) _____ | 22) _____        | 31) _____        |
| 5) _____        | 14) _____ | 23) _____        | 32) _____        |
| 6) _____        | 15) _____ | <b>24)</b> _____ | 33) _____        |
| 7) _____        | 16) _____ | 25) _____        | 34) _____        |
| <b>8)</b> _____ | 17) _____ | 26) _____        | 35) _____        |
| 9) _____        | 18) _____ | 27) _____        | <b>36)</b> _____ |