

Algebra I 1: An Introduction

Week 1: Variables

- What are variables?
- solving one-variable expressions
- solving two-variable expressions using substitution

To Practice:

One Step Equations Worksheet:

<https://cdn.kutasoftware.com/Worksheets/Alg1/One-Step%20Equations.pdf>

Writing Expressions Worksheet:

<https://cdn.kutasoftware.com/Worksheets/Alg1/Variable%20and%20Verbal%20Expressions.pdf>

Evaluating Expressions Worksheet:

<https://cdn.kutasoftware.com/Worksheets/Alg1/Evaluating%20Expressions.pdf>

Week 2: Combining Like Terms

- combining like terms
- distributive property (with variables)
- explain how dividing by 0 is undefined or indeterminate
- review order of operations in preparation for more complex problems

To Practice:

Distributive Property Worksheet:

<https://cdn.kutasoftware.com/Worksheets/Alg1/Distributive%20Property.pdf>

Combining Like Terms Worksheet:

<https://cdn.kutasoftware.com/Worksheets/Alg1/Combining%20Like%20Terms.pdf>

Order of Operations Worksheet:

<https://cdn.kutasoftware.com/Worksheets/Alg1/Order%20of%20Operations.pdf>

Week 3: Multi-Step Equations

- solving equations with variables on both sides, combining like terms, distributive property, fractions/decimals, and absolute value

To Practice:

Two-Step Equations Worksheet:

<https://cdn.kutasoftware.com/Worksheets/Alg1/Two-Step%20Equations.pdf>

Multi-Step Equations Worksheet:

<https://cdn.kutasoftware.com/Worksheets/Alg1/Multi-Step%20Equations.pdf>

Absolute Value Worksheet:

<https://cdn.kutasoftware.com/Worksheets/Alg1/Absolute%20Value%20Equations.pdf>

Week 4: Equation Word Problems

- solving equations that relate to real-world problems using variables
- solving for a certain variable in an equation with ONLY variables

To Practice:

Literal Equations Worksheet:

<https://cdn.kutasoftware.com/Worksheets/Alg1/Literal%20Equations.pdf>

Distance-Rate-Time Word Problems Worksheet:

<https://cdn.kutasoftware.com/Worksheets/Alg1/Distance%20Rate%20Time%20Word%20Problems.pdf>

Work Word Problems:

<https://cdn.kutasoftware.com/Worksheets/Alg1/Work%20Word%20Problems.pdf>

Mixture Word Problems:

<https://cdn.kutasoftware.com/Worksheets/Alg1/Mixture%20Word%20Problems.pdf>

Week 5: Solving Inequalities

- what are inequalities?
- solving one-step inequalities using line graphs
- solving two-step inequalities

To Practice:

One-Step Inequalities Worksheet:

<https://cdn.kutasoftware.com/Worksheets/Alg1/One-Step%20Inequalities.pdf>

Two-Step Inequalities Worksheet (solve graphically and algebraically):

<https://cdn.kutasoftware.com/Worksheets/Alg1/Two-Step%20Inequalities.pdf>

Week 6: Multi-Step/Compound Inequalities

- solving multi-step inequalities
- solving compound inequalities

To Practice:

Multi-Step Inequalities Worksheet (solve graphically and algebraically):

<https://cdn.kutasoftware.com/Worksheets/Alg1/Multi-Step%20Inequalities.pdf>

Compound Inequalities Worksheet (solve graphically and algebraically):

<https://cdn.kutasoftware.com/Worksheets/Alg1/Compound%20Inequalities.pdf>

Week 7: Inequalities Word Problems/Review

- writing inequalities from word problems + solving graphically and algebraically
- review inequalities

To Practice:

Inequality Word Problems Worksheets:

<http://www.cfalls.org/userfiles/1395/Classes/8285/Algebra%202%20Blizzard%20Bag%20Lara%201-3-0.pdf>

<https://www.jcschools.us/cms/lib/MO01909951/Centricity/Domain/3280/Two%20Step%20Inequality%20Word%20Problems%20Homework.pdf>

Week 8: Intro to Slope

- What is slope?
- identifying positive vs. negative vs. undefined slope
- how to find the slope of a graph
- how to graph using a slope

To Practice:

Identifying Slope Types Worksheet:

<https://www.mathworksheets4kids.com/slope/type-of-slope1.pdf>

Slope from a Graph Worksheet:

<https://cdn.kutasoftware.com/Worksheets/Alg1/Slope%20From%20a%20Graph.pdf>

Graphing a Slope Worksheet:

<https://www.mathworksheets4kids.com/slope/graphing1.pdf>

Week 9: Finding Slope without a Graph

- using rise/run or change in y/change in x to find a slope of a line passing through two points (without graphing)
- finding slope from a table

To Practice:

Slope from Two Points Worksheet (practice both graphing and finding slope algebraically):

<https://cdn.kutasoftware.com/Worksheets/Alg1/Slope%20From%20Two%20Points.pdf>

Slope from Two Points and Tables Worksheet:

<https://www.somersetcanions.com/ourpages/auto/2018/11/12/47847602/HW%20-%202%20pt%20slope.pdf>

Week 10: Intercepts

- x-intercepts vs. y-intercepts
- finding x and y intercepts using a graph
- finding x and y intercepts from a table

To Practice:

Finding Intercepts on a Graph Worksheet:

https://www.math-drills.com/algebra/algebra_find_slope_y-intercept_x-intercept_from_graph_001.pdf?v=1579267146

Intercepts from a Table (Khan Academy):

<https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:linear-equations-graphs/x2f8bb11595b61c86:x-intercepts-and-y-intercepts/e/intercepts-from-table>

Week 11: Intercepts from Equations

- finding intercepts from equations

Intercepts Worksheet:

http://petersalgebra1class.weebly.com/uploads/1/3/4/2/13423708/x_and_y_intercept_hw.pdf

Intercepts from an Equation (Khan Academy):

https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:linear-equations-graphs/x2f8bb11595b61c86:x-intercepts-and-y-intercepts/e/solving_for_the_x-intercept

Week 12: Review + Catch-Up

Resources:

- <https://cdn.kutasoftware.com/Worksheets/Alg1/One-Step%20Equations.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Variable%20and%20Verbal%20Expressions.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Evaluating%20Expressions.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Distributive%20Property.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Combining%20Like%20Terms.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Order%20of%20Operations.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Multi-Step%20Equations.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Two-Step%20Equations.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Absolute%20Value%20Equations.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Literal%20Equations.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Distance%20Rate%20Time%20Word%20Problems.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Work%20Word%20Problems.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Mixture%20Word%20Problems.pdf>
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- <https://cdn.kutasoftware.com/Worksheets/Alg1/Two-Step%20Inequalities.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Multi-Step%20Inequalities.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Compound%20Inequalities.pdf>
- <http://www.cfalls.org/userfiles/1395/Classes/8285/Algebra%202%20Blizzard%20Bag%20Lara%201-3-0.pdf>
- <https://www.jcschools.us/cms/lib/MO01909951/Centricity/Domain/3280/Two%20Step%20Inequality%20Word%20Problems%20Homework.pdf>
- <https://www.mathworksheets4kids.com/slope/type-of-slope1.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Slope%20From%20a%20Graph.pdf>
- <https://www.mathworksheets4kids.com/slope/graphing1.pdf>
- <https://cdn.kutasoftware.com/Worksheets/Alg1/Slope%20From%20Two%20Points.pdf>
- <https://www.somersetcanyons.com/ourpages/auto/2018/11/12/47847602/HW%20-%202%20pt%20slope.pdf>
- https://www.math-drills.com/algebra/algebra_find_slope_y-intercept_x-intercept_from_graph_001.pdf?v=1579267146
- <https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:linear-equations-graphs/x2f8bb11595b61c86:x-intercepts-and-y-intercepts/e/intercepts-from-table>
- http://petersalgebra1class.weebly.com/uploads/1/3/4/2/13423708/x_and_y_intercept_hw.pdf
- https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:linear-equations-graphs/x2f8bb11595b61c86:x-intercepts-and-y-intercepts/e/solving_for_the_x-intercept

