

Algebra 1 Standards, Mrs. Smith

Unit 1 - Solving Linear Equations and Inequalities with Applications

Topic	Book	Common Core Standard
1. Evaluate Expressions	1.1 - 1.2	7.EE.A.1 , HSA.SSE.A.1a , HSA.APR.A.1
2. Solve Multi Step Equations	1.3 - 1.6	HSA.A.REI.B.3 , HS.A.REI.A.1
3. Solve Equations with Vars on Both Sides	1.7	HSA.A.REI.B.3 , HSA.REI.A.1
4. Word Problems	1.8	HSA.CED.A.1 , HSF.BF.A.1a
5. Solving Equations for a Variable	1.9	HSA.CED.A.4
6. Ratios, Proportions and Percents	1.10 - 1.11	7.RP.A.2c
7. Solve Inequalities	1.12 - 1.13	HSA.REI.B.3 , HSA.CED.A.1
8. Absolute Value Equations	1.14	HSF.IF.C.7b

Unit 2 - Graphing Linear Functions

Topic	Book	Common Core Standard
9. Function Concept	2.1 - 2.2	HSF.IF.A.1, 2, 3, 4, 5, 6 , HSNQ.A.1
10. Graphing Lines	2.3 - 2.6	HSF.IF.B.4 , HSF.IF.C.7a,C.9 , HSA.REI.D.10 , HSS.ID.C.7
11. Equations of Lines	2.7	HSF.BF.A.1a
12. Parallel and Perpendicular Lines	2.8	HSG.GPE.B.5

Unit 3 - Applications of Linear Graphs and Graphing Inequalities

Topic	Book	Common Core Standard
13. Modeling with Linear Regression	3.1 - 3.2	HSF.LE.B.5 , HSA.CED.A.2 , HSS.ID.B.6a,c , HSS.ID.C.8
14. Graph Linear Inequalities	3.3	HSF.IF.C.7a
15. Graph Absolute Value	3.4	HSF.IF.C.7b

Unit 4 - Systems of Linear Equations and Applications

Topic	Book	Common Core Standard
16. Solve Systems Graphically	4.1	HSA.REI.C.6
17. Solve Systems Algebraically	4.2 - 4.4	HSA.REI.C.6
18. Systems Applications	4.5	HSA.CED.A.3
19. Systems of Inequalities	4.6	HSA.REI.D.12

Unit 5 - Exponential Operations

Topic	Book	Common Core Standard
20. Exponent Properties Involving Products	5.1	HSN.RN.A.2
21. Exponent Properties Involving Quotients	5.2	
22. Zero and Negative Exponents	5.3	
23. Scientific Notation	5.4	8.EE.A.3

Unit 6 - Polynomial Operations

Topic	Book	Common Core Standard
24. Add and Sub Polynomials	6.1	HSA.APR.A.1
25. Multiplying Polynomials	6.2 - 6.3	HSA.APR.A.1
26. Dividing Polynomials	6.4 - 6.5	HSA.APR.A.1

Unit 7 - Radical Operations

Topic	Book	Common Core Standard
27. Simplifying Radicals	7.1	HSA.REI.A.2
28. Add and Subtract Radicals	7.2	HSA.REI.A.2
29. Multiply and Divide Radicals (rationalize denom)	7.3	HSA.REI.A.2

Unit 8 - Quadratic Functions: Solving, Graphing and Applications

Topic	Book	Common Core Standard
30. GCF	8.1	HSA.SSE.A.1,2
31. Factoring Quadratics	8.2 - 8.4	HSS.SSE.A.1a,2 HSA.REI.B.4
32. Solving Quadratics	8.5 - 8.8	HSA.REI.B.4 , HSF.IF.C.8a , HSA.SSE.A.2 HSA.SSE.B.3a
33. Graphing Quadratics	8.9 - 8.10	HSF.IF.C.7a
34. Apps of Quadratics	8.11	HSA.CED.2

Unit 9 - Exponential Functions and Applications

Topic	Book	Common Core Standard
35. Exponential Functions	9.1 - 9.2	HSF.IF.C7e
36. Exponential Equations	9.3	HSA.CED.A.1
37. Sequences	9.4 - 9.7	HSF.IF.A.3 , HSF.BF.A.2

Unit 10 - Modeling

Topic	Book	Common Core Standard
38. Modeling	10.1	HSM , HSF.LE.A.1a, 1b, 2, 3, 5 , HSS.ID.8, 9