## Workout 1B: Algebra Basics

| Course Name | Covered Topics | Learning Time |
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| Get Ready | Who Should Take This Course, Help Us Know More About You, How to Use This Course, Table of Content |  |
| Day 1 Workout | Q1. Game theory, puzzles <br> Q2. Systems of equations <br> Q3. Arithmetic Tricks, multiplying by numbers with 9's | 12 videos, 48 min |
| Day 2 Workout | Q1. Fractions, decimals, percents <br> Q2. Systems of equations, diagrams <br> Q3. Change of units, multiplying by teens trick <br> Q4. How to Win at Tic-Tac-Toe <br> Bonus: The Make 15 Game (Parts 1, 2, and 3) | 13 videos, 49 min |
| Day 3 Workout | Q1. Multiplication tricks, absolute value <br> Q2. Squares Ending in 5 <br> Q3. Relative rates, track problems, approximations for pi <br> Q4. Number systems, base 60, difference of squares | 11 videos, 40 min |
| Day 4 Workout | Q1. Make 100: Order of operations <br> Q2. Puzzles, logic <br> Q3. Factorials, order of operations, approximation, powers of 2 <br> Q4. Exponential growth, reproduction factor, mathematical models | 13 videos, 48 min |
| Week 1 Challenge | Try your new skills! | 10 questions, 60 min |
| Day 5 Workout | Q1. Multiplication tricks <br> Q2. Conversions, approximations <br> Q3. Variables, equations, word problems <br> Bonus: Frame Rate | 12 videos, 39 min |
| Day 6 Workout | Q1. Easy Arithmetic Series <br> Q2. Sequences, common difference of a sequence <br> Q3. Exponential growth, reproduction factor | 12 videos, 47 min |
| Day 7 Workout | Q1. Inequalities <br> Q2. Repeating decimals, geometric series, fractions with 9's in the denominator <br> Q3. Approximations for $\pi$, repeating decimal of $\square$, logarithms <br> Q4. Mean, Median, Mode, and Range | 11 videos, 41 min |
| Day 8 Workout | Q1. Add a Line, order of operations <br> Q2. Fractional Roots <br> Q3. Relative rates, speed, frame of reference <br> Bonus: Non-Math Bonus: Toilets | 13 videos, 44 min |
| Week 2 Challenge | Try your new skills! | 10 questions, 60 min |

