

# HONORS LESSON TOPICS

Here are the topics for the special challenge lessons included in the student text. You will find one honors page after the last systematic review page for each regular lesson. Instructions for the honors pages are included in the student text.

## LESSON TOPIC

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|----|---|
| 01 | Challenge word problems   |
| 02 | More challenge word problems  |
| 03 | Kinds of numbers; solving word problems with formulas                                       |
| 04 | Interpreting graphs   |
| 05 | Introduction to vectors   |
| 06 | Plotting points on a Cartesian graph  |
| 07 | Estimating slope  |
| 08 | Practical application of slope  |
| 09 | Word problems with different rates  |
| 10 | Scatter diagrams  |
| 11 | Using linear equations to solve challenging word problems                                   |
| 12 | More linear word problems   |
| 13 | Solving two or more inequalities by graphing; application with word problem involving sales |
| 14 | Word problems with equations; interpreting information from graphs                          |
| 15 | Word problems requiring simultaneous equations  |
| 16 | Word problems involving the break-even point  |
| 17 | Break-even point; linear equations  |
| 18 | Word problems similar to coin and consecutive integer problems                              |
| 19 | Graphing word problems with exponential growth  |
| 20 | More exponential word problems  |
| 21 | Graphing exponential equations  |
| 22 | Operations with exponents; graphing exponential equations                                   |
| 23 | More exponential equations to graph   |
| 24 | Area with polynomial multiplication; advanced polynomial addition and multiplication        |
| 25 | Costs, revenue, and profit  |
| 26 | More problems with cost, revenue, and profit  |
| 27 | Polynomials that cannot be factored; graphing equations with negative exponents             |
| 28 | Complex factoring   |
| 29 | Velocity problems   |
| 30 | Traditional measuring systems   |
| 31 | More traditional measuring systems  |
| 32 | Finding molecular mass; application of significant digits                                   |
| 33 | Computer applications with base 16  |
| 34 | Kepler's Third Law; astronomical units  |
| 35 | Using the equation of a parabola to find maximum area                                       |