

HONORS 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

- | | |
|----|--|
| 01 | Challenge word problems |
| 02 | Work problems (application of rational expressions) |
| 03 | Work problem; significant digits |
| 04 | Work problem; more on significant digits |
| 05 | Changing variables in equations |
| 06 | Golden triangle and golden ratio |
| 07 | Complex exponent problems with letters only |
| 08 | Kinds of numbers; Fibonacci numbers |
| 09 | Patterns in Pascal's triangle; introduction to factorials |
| 10 | Finding permutations with factorials |
| 11 | Permutations when some items are identical |
| 12 | Using factorials to find a given term |
| 13 | Word problems using factoring; valid and invalid solutions |
| 14 | Percent applications |
| 15 | Isolating variables in formulas |
| 16 | Problems involving gear ratios |
| 17 | Advanced factoring techniques |
| 18 | Area and volume; perfect cubes and perfect squares |
| 19 | Ratio formula for step-down transformer |
| 20 | Manipulating variables in formulas |
| 21 | Graphing exponential equations |
| 22 | More exponential equations |
| 23 | Solving equations with letters only; substitution |
| 24 | Solving equations using elimination |
| 25 | Maximum and minimum values |
| 26 | Applications with parabolas |
| 27 | Graphing conic sections that are inequalities |
| 28 | Solving systems of inequalities |
| 29 | Mixture problems |
| 30 | Word problems about maximizing profits |
| 31 | Matrices and determinants |