

APPLIED MATH

Fraction & Percent - Unit Breakdown

Lesson 1: Fractions

- Review methods for adding, subtracting, multiplying, and dividing fractions
- Practice adding fractions by first reading markings within 1 inch on 3 tape measures then adding the measurements
- Practice adding fractions using common kitchen measurements
- Practice adding fractions using feet and inch markings from board lengths
- Practice subtracting fractions with borrowing & regrouping using feet & inch markings
- Practice subtracting fractions by interpreting & using a cut list from a doghouse blueprint

Lesson 2: Percents

- Background why “of” means to multiply and visualizations of what percent means
- Practice converting between fractions, decimals, and percents
- Demonstrate then practice multiple strategies for calculating percents mentally with application focus on store discounts and sales and on restaurant tips
- Review how to find percents, parts, totals, percent increases/decreases and practice using real-life word problems

Lesson 3: Mortgages (Percents in Housing)

- Learn terminology related to mortgages, differences between 15- & 30-yr mortgages, & what second mortgages are & their purposes
- Calculate real estate commissions
- Estimate property taxes given home values & info from county auditor’s website
- Find the average homeowner’s insurance rate for your area & combine with property taxes to estimate escrow accounts
- Research historical mortgage rates & apply them to an average local home value
- Use an online mortgage calculator to determine effects of principal, rate, & time on interest by changing down payments, historical interest rates, and comparing 15-yr and 30-yr mortgages
- Read & create amortization tables
- Use an online mortgage payoff calculator to determine interest savings when submitting extra payments each month
- Use a formula to calculate amortized monthly payment amounts given loan amount, down payment, interest rate, & 15- or 30-yr mortgage timeframe