

Math 93 Quick Review

FRACTIONS

To add or subtract, you MUST have a common denominator

Add or subtract numerators, keeping the same common denominator

To multiply or divide, common denominators mean nothing

To multiply, multiply numerators straight across, multiply denominators straight across

To divide, invert the divisor and multiply

All fractions must be left in lowest terms

DECIMALS

To add or subtract, line up decimal points

To multiply, count total number of decimals and ensure answer has that number

To divide, make sure divisor becomes whole by multiplying by ten, one hundred, etc.

Multiply dividend by same number

Quotient decimal goes directly above dividend decimal

PERCENTS

One percent = $1/100 = .01$

Basic story problem

X is Y percent of Z -----> $X = Y\% \text{ times } Z$

Use equation to solve for X, Y, or Z given the other two

EXAMPLES

WHAT is 200% of 10 ? $X = 2 \cdot 10$ (2 = 200%)

20 is WHAT % of 10 ? $20 = Y \cdot 10$ (Y is a percent)

20 is 200 % of WHAT ? $20 = 2 \cdot Z$ (2 = 200%)