**Index**

**A**

Absolute value 89

AC method for factoring trinomials 221

Acute angle 157

Acute triangle 159

Adding signed numbers 90

Add or subtract polynomials 204

Addition property of equality 114

Additive identity property 84

Additive inverse 90

Additive inverse property 84

Adjacent 161

Algebra 35

Angle 157

Angle of elevation 167

Angle of depression 167

Algebraic expression 35, 99

Area 55

Area unit conversion 72

Ascending order 99, 176

Associative property 84, 85

**B**

Bar or column graph 23

Base 42

Basic rules of exponents 103

Binomial 99

Business problems 194

**C**

Cartesian graphing 232

Circle 51, 53, 55

Circle (or pie) graph 25

Circumference 51

Closure property of addition 84

Closure property of multiplication 85

Coefficient 35, 99

Commission 194

Common factor 215

Complementary angles 157

Composite number 3

Compound interest 132, 194

Commutative property 84, 85

Concentration mixture problems 191

Conditional equation 118

Cone 57, 60, 61

Constant 35, 99

Consecutive integers 122

Contradiction equation 118

Coordinate 232

Coordinate plane 232

Corresponding angles 149

Corresponding sides 149

Cosecant 162

Cosine 162, 163

Cost of running electrical appliances 132

Cotangent 162

Cube 57

Cylinder 57, 60

**D**

Decagon 52

Decimal place 8

Decimal number 8

Decimal to fraction 10

Decimal to percent 10

Degree of a polynomial 100, 176

Degree of a term 100

Descending order 99, 176

Diameter 51

Difference of squares 206,

Discount 132, 194

Distance 132

Distributive property 85

Dividing monomials 103, 207

Dividing polynomials 207

Dividing signed numbers 92

Divisionproperty of equality 114

**E**

Equation 111

Equations involving decimals 117

Equations involving fractions 117

Equations solving strategy 116

Equilateral triangle 52, 159

Equivalent fractions 7

Estimating 29

Evaluating expressions 91, 92

Even numbers 2

Exponent 42, 175

**F**

Factor 3

Factoring 215

Factoring *x*2 + *b x* + *c* 218

Factoring *ax*2 + *b x* + *c* 219, 220

Factoring difference of squares 217

Factoring polynomials by grouping 216

Factoring special products 222

Factoring trinomials 218

Finding an equation of a line 339

First-degree equation 233

FOIL method 105

Four quadrants 232

Fraction 6

Fraction to percent 10

**G**

Geometry formulas 131

Grade 143

Graphing linear equation 233

Greatest common factor (GCF) 215

**H**

Hexagon 52

Highest common factor (HCF) 215

Horizontal line 235

Hypotenuses 161

**I**

Identity equation 118

Imperial and metric unit conversion 76

Imperial conversion 75

Imperial equivalents 74

Imperial system units 74

Improper fraction 7

Incomplete quadratic equation 223

Integers 2, 83

Intelligence quotient (I.Q.) 132

Irrational number 83

Isosceles triangle 159

**L**

Lateral area 59

Least common denominator (LCD) 11

Least common multiple (LCM) 11

Like fractions 7

Like terms 35, 99, 101

Line graph 24

Linear equation 233

Long division of polynomials 208

**M**

Markup 132, 194

Mean 21

Median 22

Metric conversion 70

Metric prefixes 69

Metric system 69

Mixed fraction 6

Mixed Problems 123, 196

Mode 22

Monomial 99

Motion problems 193

Multiplication property of equality 114

Multiplying binomials 105, 205

Multiply monomials 103, 205

Multiplying polynomials 205

Multiplicative identity property 85

Multiplicative inverse property 85

Multi-step equation 115

**N**

Natural numbers 83

Negative exponent177, 178

Number line 2

Number problems 120

**O**

Obtuse angle 157

Obtuse triangle 159

Octagon 52

Odd numbers 2

One exponent175, 177

Opposite side 161

Opposite inverse 90

Order of operations 44, 89, 183

Ordered pair 232

Original price 132

**P**

Radius 51

Parallelogram 50, 53, 55

Rate 144

Pentagon 52

Percent 10, 147

Percent decrease 132, 148, 194

Percent increase 132, 148, 194

Percent proportion method 147

Percent to decimal 10

Percent to fraction 10

Perfect square 182

Perimeter 52

Pitch 143

Place value 2

Point-slope form 239

Polygon 50

Polynomial 99, 203

Polynomial Division 207

Polynomial long division 208

Positive and negative numbers 88

Power 42

Power of a power 177, 178

Power of a product177, 178

Power of a quotient 177, 178

Prime factor 215

Prime factorization 4

Prime number 3

Procedure for solving word problems 120

Product of like bases103

Product rule 177

Proper fraction 6

Properties for solving equations 114

Properties of addition 84

Properties of exponents 177

Properties of equality 114

Properties of multiplication 85

Properties of zero 5, 92

Proportion 13, 145

Protractor 158

Pyramid 57

Pythagorean theorem 136

**Q**

Quadratic equation 223

Quadrilateral 50

Quotient of like bases 103

Quotient rule 177

**R**

Radius 51

Range 21

Rate 13

Ratio 13, 143

Rational number 83

Real numbers 83

Real number line 88

Real number system 83

Rectangle 50, 53, 55

Rectangular solid 57

Reflex angle 157

Regular polygon 50

Relationship between *mL*, *g* and cm3 73

Remove parentheses 102

Rhombus 50

Right angle 157

Right triangle 136, 159

Rounding 29

**S**

Sale price 132

Sales tax 194

Scalene triangle 159

Scientific calculator 27

Scientific notation 181

Secant 162

SI prefixes 69

SI – international system of units 69

Signs of division 92

Signs of multiplication 91

Signed number 88

Simple interest 132, 194

Similar triangles 149

Simplifying exponential expressions 180

Simplifying square roots 183

Sine 162, 163

Slope 234

Slope-intercept equation 236, 237

Solving equations 115

Solving formulas 134

Solving triangles 165

Solving quadratic equations 224

Solution 111

Special binomial products 206

Sphere 57, 61

Square 50, 52, 55

Square of difference 206, 222

Square of sum 206, 222

Square root 182

Statistics 21

Straight angle 157

Substituting into formulas 132

Subtracting signed numbers 90

Subtraction property of equality 114

Supplementary angles 157

Surface area 59

**T**

Table 23

Tangent 162, 163

Term 35, 99

Translation method 148

Trapezoid 50, 53, 55

Triangle 55, 159

Trigonometry 161

Trigonometric functions 162

Trinomial 99

Types of equations 118

**U**

Unit factor method 71

Unit rate 144

Unlike fractions 7

**V**

Value mixture problems 189

Variable 35

Vertical angles 157

Vertical line 235

Volume 57

Volume unit conversion 72

**W**

Whole numbers 2, 83

**X**

*x* – intercept 232

**Y**

*y* – intercept 232

**Z**

Zero exponent175, 177

Zero-product property223