

## 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
Division property of equality	114

<b>E</b>			
Equation	111	Identity equation	118
Equations involving decimals	117	Imperial and metric unit conversion	76
Equations involving fractions	117	Imperial conversion	75
Equations solving strategy	116	Imperial equivalents	74
Equilateral triangle	52, 159	Imperial system units	74
Equivalent fractions	7	Improper fraction	7
Estimating	29	Incomplete quadratic equation	223
Evaluating expressions	91, 92	Integers	2, 83
Even numbers	2	Intelligence quotient (I.Q.)	132
Exponent	42, 175	Irrational number	83
		Isosceles triangle	159
<b>F</b>			
Factor	3	<b>L</b>	
Factoring	215	Lateral area	59
Factoring $x^2 + b x + c$	218	Least common denominator (LCD)	11
Factoring $ax^2 + b x + c$	219, 220	Least common multiple (LCM)	11
Factoring difference of squares	217	Like fractions	7
Factoring polynomials by grouping	216	Like terms	35, 99, 101
Factoring special products	222	Line graph	24
Factoring trinomials	218	Linear equation	233
Finding an equation of a line	339	Long division of polynomials	208
First-degree equation	233		
FOIL method	105	<b>M</b>	
Four quadrants	232	Markup	132, 194
Fraction	6	Mean	21
Fraction to percent	10	Median	22
		Metric conversion	70
<b>G</b>		Metric prefixes	69
Geometry formulas	131	Metric system	69
Grade	143	Mixed fraction	6
Graphing linear equation	233	Mixed Problems	123, 196
Greatest common factor (GCF)	215	Mode	22
		Monomial	99
<b>H</b>		Motion problems	193
Hexagon	52	Multiplication property of equality	114
Highest common factor (HCF)	215	Multiplying binomials	105, 205
Horizontal line	235	Multiply monomials	103, 205
Hypotenuses	161	Multiplying polynomials	205
		Multiplicative identity property	85
<b>I</b>		Multiplicative inverse property	85
		Multi-step equation	115

**N**

Natural numbers	83
Negative exponent	177, 178
Number line	2
Number problems	120

**O**

Obtuse angle	157
Obtuse triangle	159
Octagon	52
Odd numbers	2
One exponent	175, 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 product	177, 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 bases	103
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 $cm^3$	73
Remove parentheses	102

Rhombus	50	Surface area	59
Right angle	157		
Right triangle	136, 159	<b>T</b>	
Rounding	29	Table	23
		Tangent	162, 163
<b>S</b>		Term	35, 99
Sale price	132	Translation method	148
Sales tax	194	Trapezoid	50, 53, 55
Scalene triangle	159	Triangle	55, 159
Scientific calculator	27	Trigonometry	161
Scientific notation	181	Trigonometric functions	162
Secant	162	Trinomial	99
SI prefixes	69	Types of equations	118
SI – international system of units	69		
Signs of division	92	<b>U</b>	
Signs of multiplication	91	Unit factor method	71
Signed number	88	Unit rate	144
Simple interest	132, 194	Unlike fractions	7
Similar triangles	149		
Simplifying exponential expressions	180	<b>V</b>	
Simplifying square roots	183	Value mixture problems	189
Sine	162, 163	Variable	35
Slope	234	Vertical angles	157
Slope-intercept equation	236, 237	Vertical line	235
Solving equations	115	Volume	57
Solving formulas	134	Volume unit conversion	72
Solving triangles	165		
Solving quadratic equations	224	<b>W</b>	
Solution	111	Whole numbers	2, 83
Special binomial products	206		
Sphere	57, 61	<b>X</b>	
Square	50, 52, 55	$x$ – intercept	232
Square of difference	206, 222		
Square of sum	206, 222	<b>Y</b>	
Square root	182	$y$ – intercept	232
Statistics	21		
Straight angle	157	<b>Z</b>	
Substituting into formulas	132	Zero exponent	175,
Subtracting signed numbers	90	177	
Subtraction property of equality	114	Zero-product property	223
Supplementary angles	157		

---