

---

## INDEX

---

### **A**

- Acute angle**, 471
- Acute triangle**, 483
- Addend**, 25
- Adding**
  - addend, 25
  - carrying, 40
  - decimals, 336, 340
  - decimals and whole numbers, 362
  - defined, 25
  - fractions, 240, 248, 261
  - long addition, 36
  - mixed numbers, 244
  - money, 408
  - sum, 25
  - three or more numbers, 43
  - three or more fractions, 252
  - whole numbers, 25
- Adding three or more**, 43
- Angles**
  - acute angle, 471
  - defined, 466
  - naming, 466
  - obtuse angle, 471
  - right angle, 471
  - sides, 466
  - vertex, 466
- Area**, 495
- Average**, 136

### **B**

- Bar graph**, 577
- Billions**, 12-13
- Borrowing**, 51

### **C**

- Calendars**, 122
- Carrying**, 40
- Centiliter**, 540
- Centimeter**, 536
- Cents**, 404
- Chance**, 615
- Circle graph**, 584
- Circles**
  - circumference, 503
  - defined, 502
  - diameter, 502
  - naming, 502
  - radius, 502
- Circumference**, 503
- Clocks**, 116

- Common factors**, 219
- Common multiples**, 231
- Comparing**
  - decimals, 332
  - fractions, 176
  - whole numbers, 17
- Comparison shopping**, 422
- Completing the whole**, 304
- Cone**, 509
- Converting**
  - cents to dollars, 413
  - fractions to decimals, 324
  - fractions to ratios, 204
  - improper fractions to mixed numbers, 200
  - metric units, 536
  - mixed numbers to decimals, 324
  - mixed numbers to improper fractions, 256
  - percents to fractions, 446
  - ratios to fractions, 204
  - units of length, 522, 545
  - units of liquid, 527
  - units of weight, 532, 545
- Counting numbers**, 21
- Credit Cards**, 451
- Cube**, 508
- Cylinder**, 509
- D**
- Days**, 122
- Decameter**, 536
- Decimal point**, 324
- Decimals**
  - adding, 336, 340
  - adding with a whole number, 362
  - comparing, 332
  - converting with fractions, 324
  - converting with mixed numbers, 324
  - decimal point, 324
  - defined, 324
  - dividing, 388
  - dividing by a whole number, 375, 384
  - dividing by 10, 100, and 1000, 380
  - hundredths, 328
  - multiplying, 344, 354
  - multiplying by 10, 100, and 1000, 371

multiplying with a whole number, 367

remainders, 606

removing extra zeros, 349

rounding, 417

subtracting, 336, 340

subtracting with a whole number, 362

tenths, 324

thousandths, 394

### **Decimals in the real world**

comparison shopping, 422

money, 404, 408

### **Decimeter**, 536

### **Denominator**, 152

### **Diameter**, 502

### **Difference**, 28

### **Digits**, 6

### **Dividend**, 71

### **Dividing**

by zero, 75

decimals, 388

decimals by 10, 100, and 1000, 380

decimals by whole numbers, 375, 384

defined, 71

dividend, 71

divisor, 71

facts, 75

fractions, 279, 283

in your head, 75

long division, 92

mixed numbers, 287

quotient, 71

with two digits, 104, 144

zeros in the quotient, 100

### **Dividing with two digits**, 104, 144

### **Divisor**, 71

### **Dollars**, 404

### **E**

### **Equations**

defined, 611

solving, 611

### **Estimating**

defined, 140

project times, 317

### **Even numbers**, 21

### **F**

### **Faces**, 508

## INDEX

---

### **Factors**

defined, 60  
finding the factors, 214  
greatest common factor, 219

### **Fahrenheit, 572**

### **Fluid ounce, 532**

### **Foot, 522**

### **Fractions**

adding, 240, 248, 261  
adding three or more, 252  
comparing, 176  
completing the whole, 304  
converting to decimals, 324  
defined, 152  
denominator, 152  
dividing, 279, 283  
greatest common factor, 219, 223  
Law of Equivalent Fractions, 168  
least common multiple, 231  
mixed numbers, 184  
more than one on top, 157  
multiplying, 270, 275  
numerator, 152  
reducing, 172, 223  
subtracting, 240, 248, 261

### **Fractions in the real world**

laminating, 296  
leftovers, 296  
model ships, 296  
planning a wedding, 296  
weight on the moon, 296

## **G**

### **Gallon, 527**

### **Geometric solids**

cone, 509  
cube, 508  
cylinder, 509  
defined, 508  
faces, 508  
pyramid, 508  
rectangular solid, 508  
sphere, 509

### **Geometry**

acute angle, 471  
acute triangle, 483

angle, 466  
area, 495  
circle, 502-503  
circumference, 503  
cone, 509  
cube, 508  
cylinder, 509  
defined, 460  
diameter, 502  
faces, 508  
geometric solids, 508-509  
hexagon, 483  
intersecting lines, 476  
line, 460  
line segment, 460  
obtuse angle, 471  
obtuse triangle, 483  
octagon, 483  
parallel lines, 476  
pentagon, 483  
perimeter, 489  
perpendicular lines, 476  
point, 460  
polygons, 483  
pyramid, 508  
quadrilateral, 483  
radius, 502  
rectangle, 483  
rectangular solid, 508  
right angle, 471  
right triangle, 483  
sides, 466  
solids, 508-509  
sphere, 509  
square, 483  
vertex, 466

### **Gram, 540**

### **Graphs**

bar graph, 577  
circle graph, 584  
defined, 577  
line graph, 578  
pie chart, 584

### **Greatest common factor**

defined, 219  
reducing with, 223

## **H**

### **Hectometer, 536**

### **Hexagon, 483**

### **Hours, 116**

### **Hundredths, 328**

## **I**

### **Improper fractions**

converting from a mixed number, 256  
converting to a mixed number, 200  
defined, 195

### **Inch, 522**

### **Inequality sign, 17**

### **Intersect, 466**

### **Intersecting lines, 476**

## **K**

### **Kilogram, 540**

### **Kiloliter, 540**

### **Kilometer, 536**

## **L**

### **Laminating, 296**

### **Law of Equivalent Fractions, 168**

### **Least common multiple, 231**

### **Line graph, 578**

### **Lines**

defined, 460  
intersecting, 476  
naming, 460  
parallel, 476  
perpendicular, 476

### **Line segments, 460**

### **Liter, 540**

### **Long addition, 36**

### **Long division, 92**

### **Long multiplication, 84**

### **Long subtraction, 47**

## **M**

### **Mass, 540**

### **Measuring with a ruler, 561**

### **Meter, 540**

### **Metric system**

centiliter, 540  
centimeter, 536  
converting, 536  
decameter, 536  
decimeter, 536  
defined, 536  
gram, 540  
hectometer, 536  
kilogram, 540  
kiloliter, 540  
kilometer, 536  
liter, 540

## INDEX

---

- mass, 540  
meter, 536  
milligram, 540  
milliliter, 540  
millimeter, 536
- Mile**, 522  
**Milligram**, 540  
**Milliliter**, 540  
**Millimeter**, 536  
**Millions**, 12-13  
**Minutes**, 116  
**Mixed numbers**  
    adding, 244, 261  
    converting from an improper fraction, 200  
    converting to an improper fraction, 256  
    converting to decimals, 324  
    defined, 184  
    dividing, 287  
    multiplying, 287  
    subtracting, 244, 261  
    without a picture, 190
- Model ships**, 300
- Money**  
    adding, 408  
    cents, 404  
    converting cents to dollars, 413  
    dollars, 404  
    subtracting, 408
- Moon**, 313
- Multiples**, 231
- Multiplying**  
    as repeated addition, 60  
    decimals, 344, 354  
    decimals by 10, 100, and 1000, 371  
    decimal and a whole number, 367  
    defined, 60  
    factors, 60  
    fractions, 270, 275  
    in your head, 63  
    long multiplication, 84  
    mixed numbers, 287  
    multiplication facts, 60  
    product, 60  
    three or more numbers, 67  
    with two digits, 88  
    with three or more digits, 108
- Multiplying three or more numbers**, 67
- Multiplying with two digits**, 88
- Multiplying with three or more digits**, 108
- N**
- Naming**  
    angles, 466  
    circles, 502  
    line segments, 460  
    lines, 460
- Negative numbers**, 567
- Number line**, 556
- Number sequences** (see: **Sequences**)
- Numbers**  
    big numbers, 12-13  
    comparing, 17  
    even numbers, 21  
    in words, 9  
    mixed numbers, 184  
    negative numbers, 567  
    odd numbers, 21  
    place value system, 6  
    positive numbers, 568  
    prime numbers, 227  
    writing numbers, 6
- Numerator**, 152
- O**
- Obtuse angle**, 471  
**Obtuse triangle**, 483  
**Octagon**, 483  
**Odd numbers**, 21  
**Operations**, 25, 596  
**Order of operations rules**, 596, 601
- Ounce**  
    liquid, 527  
    weight, 532
- P**
- Parallel lines**, 476
- Parentheses**  
    order of operations, 601
- Pentagon**, 483
- Percents**  
    converting to a fraction, 446  
    defined, 430  
    finding percents of large numbers, 441  
    finding percents out of one hundred, 430, 436
- Perimeter**, 489
- Perpendicular lines**, 476
- Pie chart**, 584
- Pint**, 527
- Place value system**, 6
- Point**, 460
- Polygons**  
    acute triangle, 483  
    area, 495  
    defined, 483  
    hexagon, 483  
    obtuse triangle, 483  
    octagon, 483  
    pentagon, 483  
    perimeter, 489  
    quadrilaterals, 483  
    rectangle, 483  
    right triangle, 483  
    square, 483
- Positive numbers**, 567
- Pound**, 532
- Prime numbers**, 227
- Probability**, 615
- Product**, 60
- Project times**, 317
- Proper fractions**, 195
- Pyramid**, 508
- Q**
- Quadrilaterals**  
    defined, 483  
    rectangle, 483  
    square, 483
- Quart**, 527
- Quotient**, 71
- R**
- Radius**, 502
- Ratios**, 204
- Rectangle**, 483
- Rectangular solid**, 508
- Reducing**  
    extra zeros in decimals, 349  
    fractions, 172  
    with the greatest common factor, 223
- Regrouping**, 51
- Remainders**  
    long division, 96  
    decimal, 606
- Repeated addition**, 60
- Right angle**, 471
- Right triangle**, 483

---

## INDEX

---

**Rounding**

decimals, 417  
whole numbers, 140

**Ruler**, 561**S****Sequences**, 21**Sides**, 466**Solids** (see: **Geometric solids**)**Sphere**, 509**Square**, 483**Subtracting**

borrowing, 51  
decimals, 336, 340  
decimals and whole numbers, 362  
defined, 28  
difference, 28  
fractions, 240, 248, 261  
long subtraction, 47  
mixed numbers, 244  
money, 408  
regrouping, 51  
whole numbers, 28

**Sum**, 25**T****Temperature**

defined, 572  
Fahrenheit, 572  
thermometer, 572

**Tenths**, 324**Thermometer**, 572**Thousandths**, 394**Time**, 116, 122**Ton**, 532**Triangles**

acute triangle, 483  
defined, 483  
obtuse triangle, 483  
right triangle, 483

**Two-step problems**, 132**U****Units of length**

converting, 522  
foot, 522  
inch, 522  
mile, 522  
yard, 522

**Units of liquid**

converting, 527  
gallon, 527

**ounce**, 527

pint, 527  
quart, 527

**Units of measure**

length, 522  
liquid, 527  
metric system, 536, 540  
weight, 532

**Units of weight**

converting, 532  
ounce, 532  
pound, 532  
ton, 532

**V****Vertex**, 466**W****Weddings**, 309**Weeks**, 122**Weight on the moon**, 313**Whole numbers**

adding, 25  
comparing, 17  
defined, 21  
dividing, 71  
multiplying, 60  
rounding, 140  
subtracting, 28

**Word problems**

averages, 136  
two-step problems, 132  
whether to multiply or divide, 127

**Writing numbers**, 6**Y****Yard**, 522