## Tables

## Symbols

| Symbol | Meaning | Page |
| :---: | :---: | :---: |
| $\begin{gathered} 3 \cdot x \\ 3 x \\ 3(x) \end{gathered}$ | 3 times $x$ | 2 |
| $\frac{a}{b}$ | $a$ divided by $b, b \neq 0$ | 2 |
| $a^{4}$ | the fourth power of $a$, or $a \cdot a \cdot a \cdot a$ | 3 |
| () | parentheses-a <br> grouping symbol | 9 |
| [] | brackets-a grouping symbol | 9 |
| = | is equal to | 21 |
| < | is less than | 21 |
| > | is greater than | 21 |
| $\leq$ | is less than or equal to | 21 |
| $\geq$ | is greater than or equal to | 21 |
| $\stackrel{?}{ }$ | is equal to? | 22 |
| $(x, y)$ | ordered pair | 43 |
| $\ldots$ | continues on | 64 |
| $-a$ | the opposite of $a$ | 66 |
| $\|a\|$ | the absolute value of $a$ | 66 |
| $\left[\begin{array}{ll}1 & 0 \\ 0 & 1\end{array}\right]$ | matrix | 94 |
| $\frac{1}{a}$ | the reciprocal of $a, a \neq 0$ | 103 |
| $\sqrt{a}$ | the nonnegative square root of $a, a \geq 0$ | 110 |
| $\pm$ | plus or minus | 110 |
| $\approx$ | is approximately equal to | 112 |
| $a: b$ | the ratio of $a$ to $b$ | 162 |


| Symbol | Meaning | Page |
| :---: | :---: | :---: |
| $\cong$ | is congruent to | 174 |
| $\sim$ | is similar to | 174 |
| $A^{\prime}$ | the image of point $A$ | 213 |
| m | slope | 235 |
| $b$ | $y$-intercept | 244 |
| $a$ | constant of variation | 253 |
| $f(x)$ | the value of the function $f$ at $x$ | 262 |
| $a^{-n}$ | $\frac{1}{a^{n}}, a \neq 0$ | 503 |
| $\sqrt[3]{a}$ | the cube root of $a$ | 510 |
| $c \times 10^{n}$ | scientific notation, $1 \leq c<10$ and $n$ is an integer | 512 |
| $P(A)$ | the probability of an event $A$ | 844 |
| $n!$ | $\begin{aligned} & n \text { factorial, or } \\ & n \cdot(n-1) \cdot \ldots \cdot 2 \cdot 1, n \end{aligned}$ is a nonnegative integer | 852 |
| ${ }_{n} P_{r}$ | the number of permutations of $n$ objects taken $r$ at a time, $r \leq n$ | 852 |
| ${ }_{n} C_{r}$ | the number of combinations of $n$ objects taken $r$ at a time, $r \leq n$ | 856 |
| $\bar{x}$ | $x$ bar, the mean of numerical data | 875 |
| $\sigma^{2}$ | variance, the square of standard deviation | 879 |
| $\sigma$ | standard deviation, the nonnegative square root of variance | 879 |

