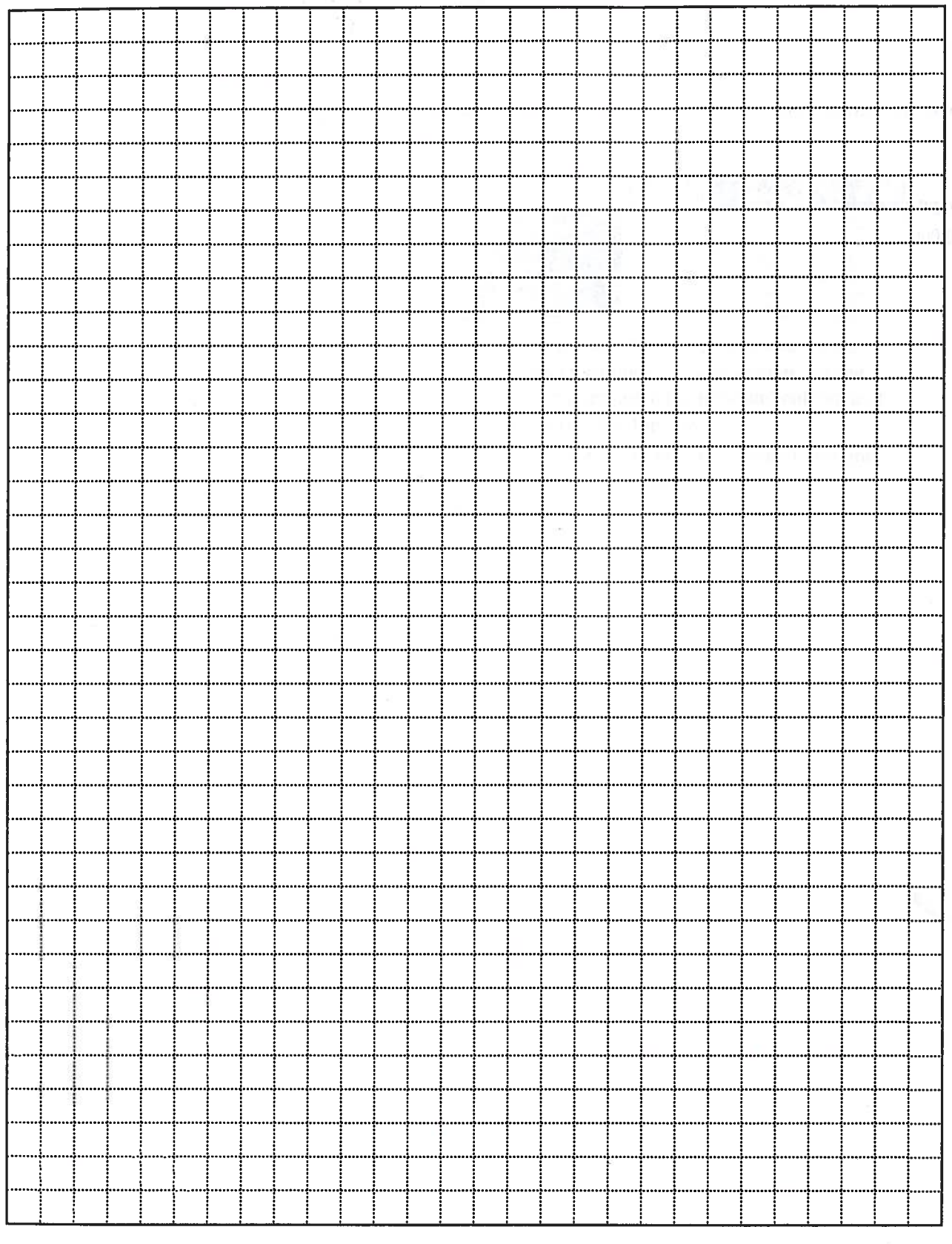
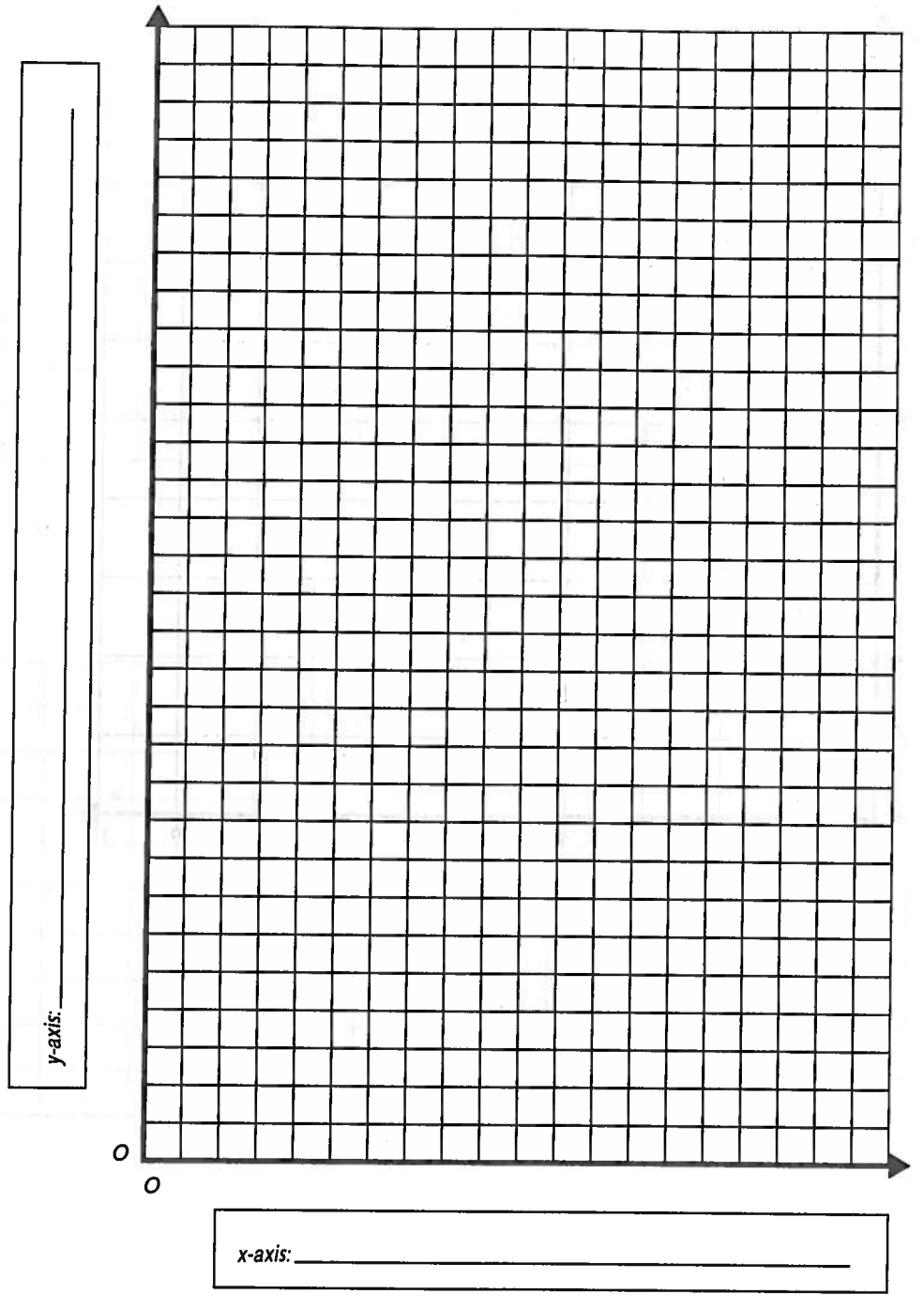
Name _____ Date _____ Class _____

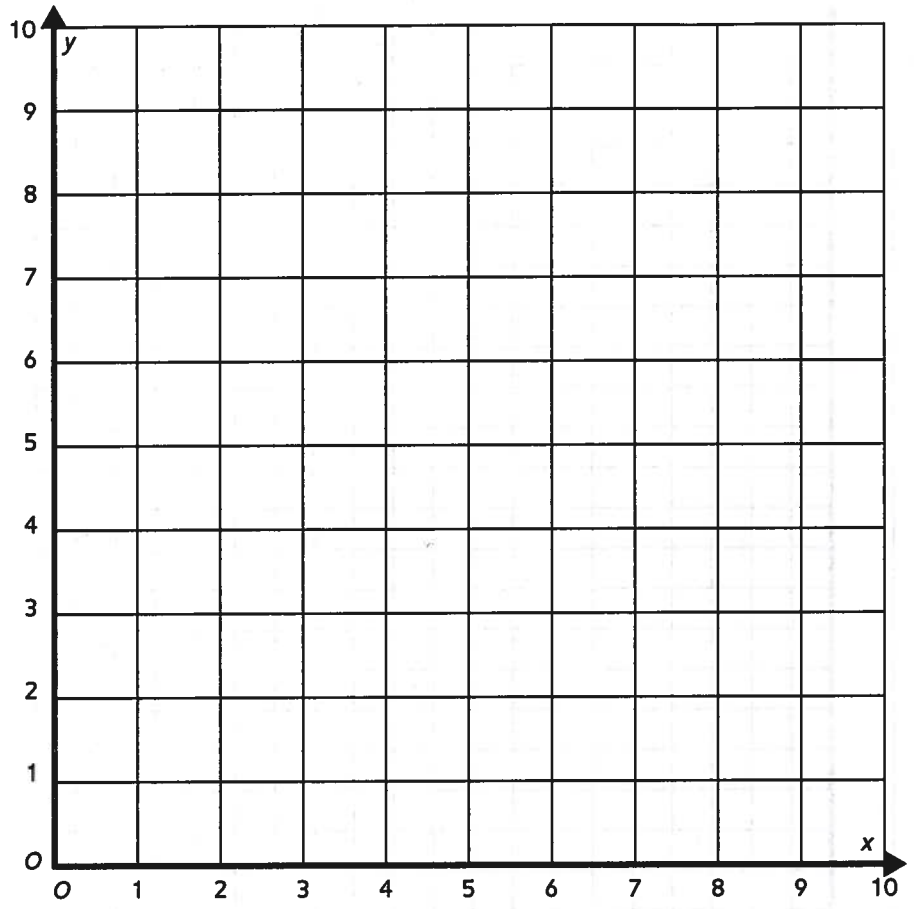


Name _____ Date _____ Class _____



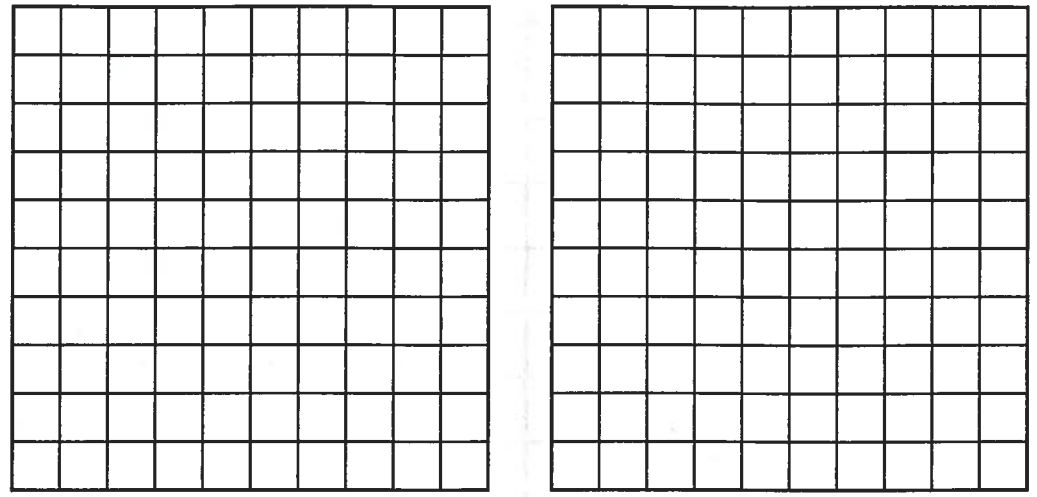
GRAPH ACTIVITY SHEET 2

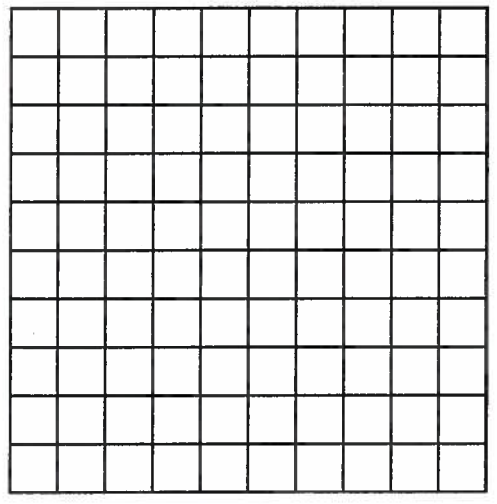
Name _____ **Date** _____ **Class** _____

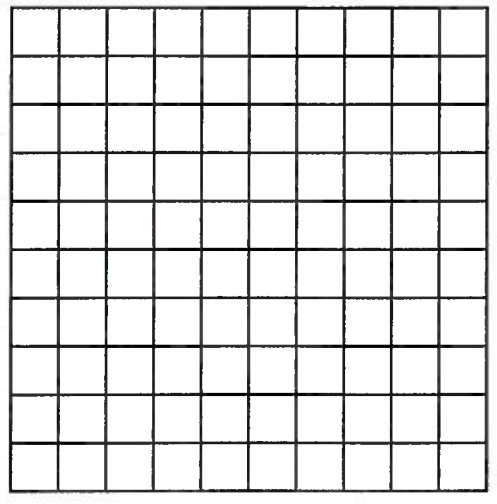


DECIMAL GRIDS

Name _____ **Date** _____ **Class** _____

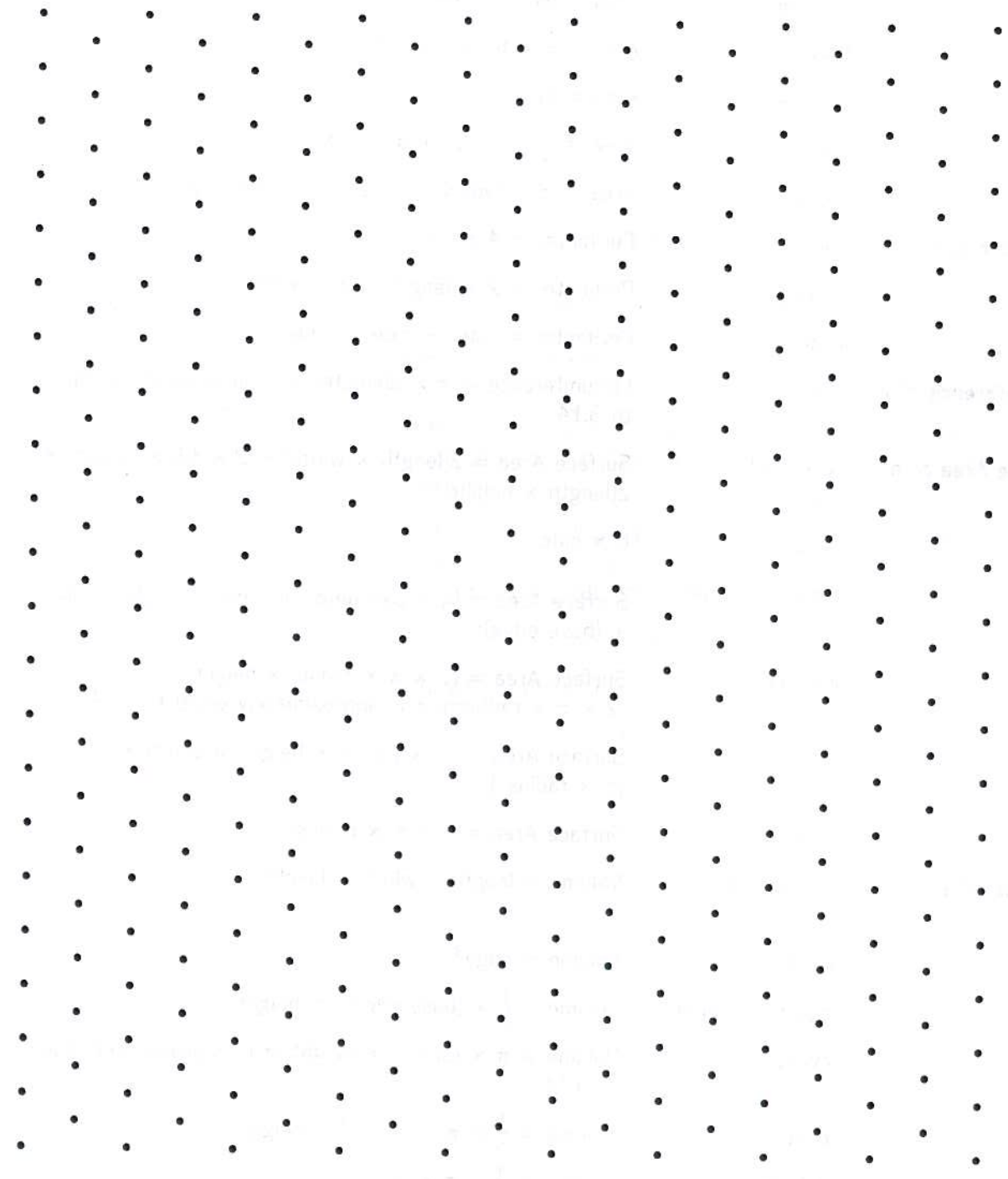






Name _____ Date _____ Class _____

Name _____ Date _____ Class _____



Area of a	square	Area = side^2
	rectangle	Area = length × width
	triangle	Area = $\frac{1}{2}$ × base × height
	parallelogram	Area = base × height
	trapezoid	Area = $\frac{1}{2}$ × (base$_1$ + base$_2$) × height
	circle	Area = π × radius^2; π is approximately equal to 3.14
Perimeter of a	square	Perimeter = 4 × side
	rectangle	Perimeter = 2 × length + 2 × width
	triangle	Perimeter = side$_1$ + side$_2$ + side$_3$
Circumference of a	circle	Circumference = π × diameter; π is approximately equal to 3.14
Surface Area of a	rectangular/ right prism	Surface Area = 2(length × width) + 2(width × height) + 2(length × height)
	cube	6 × side^2
	square pyramid	Surface Area = ($\frac{1}{2}$ × perimeter of base × height of slant) + (base edge)^2
	cylinder	Surface Area = (2 × π × radius × height) + (2 × π × radius^2); π is approximately equal to 3.14
	cone	Surface Area = (π × radius × height of slant) + (π × radius^2)
	sphere	Surface Area = 4 × π × radius^2
Volume of a	rectangular/ right prism	Volume = length × width × height
	cube	Volume = edge^3
	square pyramid	Volume = $\frac{1}{3}$ × (base edge)^2 × height
	cylinder	Volume = π × radius^2 × height; π is approximately equal to 3.14
	cone	Volume = $\frac{1}{3}$ × π × radius^2 × height
	sphere	Volume = $\frac{4}{3}$ × π × radius^3

Coordinate Geometry	(x_1, y_1) and (x_2, y_2) are two points in a plane. slope of a line = $\frac{y_2 - y_1}{x_2 - x_1}$; (x_1, y_1) and (x_2, y_2) are two points on the line slope-intercept form of the equation of a line $y = mx + b$, when m is the slope of the line and b is the y-intercept point-slope form of the equation of a line $y - y_1 = m(x - x_1)$, when m is the slope of the line
Pythagorean Relationship	$a^2 + b^2 = c^2$; in a right triangle, a and b are legs, and c is the hypotenuse
Quadratic Equations	standard form of a quadratic equation $ax^2 + bx + c = 0$ quadratic formula $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
Measures of Central Tendency	**mean** = $\frac{x_1 + x_2 + \ldots + x_n}{n}$, where the x's are the values for which a mean is desired, and n is the total number of values for x **median** = the middle value of an odd number of ordered scores, and the average of the two middle values of an even number of ordered scores
Simple Interest	interest = principal × rate × time
Distance	distance = rate × time

Order of Operations

The TI-30XS MultiView™ automatically evaluates numerical expressions using the Order of Operations based on how the expression is entered.

Example
$12 \div 2 \times 3 + 5 =$
[1] [2] [÷] [2] [×] [3] [+] [5] [enter]

Note that the 2 is **not** multiplied to the 3 before division occurs.

The correct answer is 23.

Decimals

To calculate with decimals, enter the whole number, then [.], then the fractional part.

Example
$11.526 + 5.89 - 0.4 =$
[1] [1] [.] [5] [2] [6] [+] [5] [.] [8] [9]
[−] [0] [.] [4] [enter]

The decimal point helps line up the place value.

The correct answer is 17.016.

Fractions

To calculate with fractions, use the [$\frac{n}{d}$] button. The answer will automatically be in its simplest form.

Example
$\frac{3}{7} \div \frac{4}{5} =$
[3] [$\frac{n}{d}$] [7] [◂▸] [÷] [4] [$\frac{n}{d}$] [5] [sto▸] [enter]

This key combination works if the calculator is in Classic mode or MathPrint™ mode.

The correct answer is $\frac{15}{28}$.

Mixed Numbers

To calculate with mixed numbers, use the [2nd] [$\frac{n}{d}$] button. To see the fraction as an improper fraction, don't press the [2nd] [x10^□] buttons in sequence below.

Example
$8\frac{2}{3} \times 4\frac{3}{5} =$
[8] [2nd] [$\frac{n}{d}$] [2] [sto▸] [3] [sto▸] [×] [4] [2nd]
[$\frac{n}{d}$] [3] [◂▸] [5] [sto▸] [2nd] [x10^□] [enter]

This key combination only works if the calculator is in MathPrint™ mode.

The correct answer is $39\frac{13}{15}$.

Percentages

To calculate with percentages, enter the percent number, then [2nd] [(].

Example
$72\% \times 500 =$
[7] [2] [2nd] [(] [×] [5] [0] [0] [enter]

The correct answer is 360.

Powers & Roots

To calculate with powers and roots, use the [x^2] and [^] buttons for powers and the [2nd] [x^2] and [2nd] [^] buttons for roots.

Example
$21^2 =$
[2] [1] [x^2] [enter]

The correct answer is 441.

Example
$2^8 =$
[2] [^] [8] [enter]

The correct answer is 256.

Example
$\sqrt{729} =$
[2nd] [$\sqrt{x}$] [7] [2] [9] [enter]

The correct answer is 27.

Example
$\sqrt[5]{16807} =$
[5] [2nd] [^] [1] [6] [8] [0] [7] [enter]

The correct answer is 7.

You can use the [2nd] [x^2] and [2nd] [^] buttons to also compute squares and square roots.

Scientific Notation

To calculate in scientific notation, use the [x10^□] button as well as make sure your calculator is in Scientific notation in the [mode] menu.

Example
$6.81 \times 10^4 + 5.201 \times 10^4 =$
[6] [.] [8] [1] [x10^□] [4] [sto▸] [+]
[5] [.] [2] [0] [1] [x10^□] [4] [sto▸] [enter]

When you are done using scientific notation, make sure to change back to Normal in the [mode] menu.

The correct answer is 1.2011×10^5.

Toggle

In MathPrint™ mode, you can use the toggle button [◂▸] to switch back and forth from exact answers (fractions, roots, π, etc.) and decimal approximations.

Example
$\frac{3}{7} =$
[3] [$\frac{n}{d}$] [7] [enter] [◂▸]

If an exact answer is not required, you can press the toggle button [◂▸] immediately to get a decimal approximation from an exact answer without reentering the expression.

The correct answer is 0.428571429.