## Scientific Notation (A)

## Convert between scientific notation and ordinary numbers.

| $1.23 \times 10^{5}$ | $=$ | 3,450,000 | $=$ |
| :---: | :---: | :---: | :---: |
| 9,330 | $=$ | 500,000 | $=$ |
| $7.807 \times 10^{8}$ | $=$ | 48,000 | $=$ |
| 3,923,000 | $=$ | $7.5 \times 10^{4}$ | $=$ |
| $2.6 \times 10^{5}$ | $=$ | 140,000,000 | $=$ |
| $4.34 \times 10^{5}$ | $=$ | $3.09 \times 10^{4}$ | $=$ |
| 879,600 | $=$ | $2.2 \times 10^{8}$ | $=$ |
| $3.034 \times 10^{7}$ | $=$ | $4.618 \times 10^{4}$ | $=$ |
| 962,000 | $=$ | $7.9 \times 10^{7}$ | $=$ |
| $6.7 \times 10^{5}$ | = | $8.4 \times 10^{8}$ | $=$ |

$6.7 \times 10^{5}=$
$8.4 \times 10^{8}=$

## Scientific Notation (A) Answers

Convert between scientific notation and ordinary numbers.

| $1.23 \times 10^{5}$ | $=$ | 123,000 | 3,450,000 | $=$ | $3.45 \times 10^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9,330 | $=$ | $9.33 \times 10^{3}$ | 500,000 | $=$ | $5 \times 10^{5}$ |
| $7.807 \times 10^{8}$ | $=$ | 780,700,000 | 48,000 | $=$ | $4.8 \times 10^{4}$ |
| 3,923,000 | = | $3.923 \times 10^{6}$ | $7.5 \times 10^{4}$ | $=$ | 75,000 |
| $2.6 \times 10^{5}$ | $=$ | 260,000 | 140,000,000 | $=$ | $1.4 \times 10^{8}$ |
| $4.34 \times 10^{5}$ | = | 434,000 | $3.09 \times 10^{4}$ | $=$ | 30,900 |
| 879,600 | $=$ | $8.796 \times 10^{5}$ | $2.2 \times 10^{8}$ | $=$ | 220,000,000 |
| $3.034 \times 10^{7}$ | $=$ | 30,340,000 | $4.618 \times 10^{4}$ | $=$ | 46,180 |
| 962,000 | $=$ | $9.62 \times 10^{5}$ | $7.9 \times 10^{7}$ | $=$ | 79,000,000 |
| $6.7 \times 10^{5}$ | $=$ | 670,000 | $8.4 \times 10^{8}$ | $=$ | 840,000,000 |

$6.7 \times 10^{5}=670,000$
$8.4 \times 10^{8}=840,000,000$

## Scientific Notation (B)

## Convert between scientific notation and ordinary numbers.

| $3.87 \times 10^{5}$ | $=$ | $8.3 \times 10^{6}$ | $=$ |
| :---: | :---: | :---: | :---: |
| 627,000,000 | $=$ | 92,100 | $=$ |
| 125,000,000 | $=$ | $9.77 \times 10^{7}$ | $=$ |
| 66,000 | $=$ | 7,100,000 | $=$ |
| 6,809,000 | $=$ | $4.97 \times 10^{4}$ | $=$ |
| $4.02 \times 10^{3}$ | $=$ | 98,400 | $=$ |
| 5,310 | $=$ | $6.184 \times 10^{3}$ | $=$ |
| 7,800 | $=$ | $2.9 \times 10^{4}$ | $=$ |
| $8.25 \times 10^{3}$ | $=$ | 4,210 | $=$ |
| 190,000,000 | $=$ | 716,500 | $=$ |

$190,000,000 \quad$ 716,500 $=$

## Scientific Notation (B) Answers

Convert between scientific notation and ordinary numbers.

| $3.87 \times 10^{5}$ | $=$ | 387,000 | $8.3 \times 10^{6}$ | $=$ | 8,300,000 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 627,000,000 | $=$ | $6.27 \times 10^{8}$ | 92,100 | $=$ | $9.21 \times 10^{4}$ |
| 125,000,000 | $=$ | $1.25 \times 10^{8}$ | $9.77 \times 10^{7}$ | $=$ | 97,700,000 |
| 66,000 | $=$ | $6.6 \times 10^{4}$ | 7,100,000 | $=$ | $7.1 \times 10^{6}$ |
| 6,809,000 | $=$ | $6.809 \times 10^{6}$ | $4.97 \times 10^{4}$ | $=$ | 49,700 |
| $4.02 \times 10^{3}$ | $=$ | 4,020 | 98,400 | $=$ | $9.84 \times 10^{4}$ |
| 5,310 | $=$ | $5.31 \times 10^{3}$ | $6.184 \times 10^{3}$ | $=$ | 6,184 |
| 7,800 | $=$ | $7.8 \times 10^{3}$ | $2.9 \times 10^{4}$ | $=$ | 29,000 |
| $8.25 \times 10^{3}$ | $=$ | 8,250 | 4,210 | $=$ | $4.21 \times 10^{3}$ |
| 190,000,000 | $=$ | $1.9 \times 10^{8}$ | 716,500 | $=$ | $7.165 \times 10^{5}$ |

$$
190,000,000=1.9 \times 10^{8} \quad 716,500=7.165 \times 10^{5}
$$

## Scientific Notation (C)

Convert between scientific notation and ordinary numbers.

| 802,000,000 | $=$ | $7.4 \times 10^{3}$ | $=$ |
| :---: | :---: | :---: | :---: |
| 140,000,000 | $=$ | 41,700,000 | $=$ |
| $4.9 \times 10^{4}$ | $=$ | $7.879 \times 10^{3}$ | $=$ |
| 37,000,000 | $=$ | $5.659 \times 10^{5}$ | $=$ |
| 14,850,000 | $=$ | $8.334 \times 10^{3}$ | $=$ |
| 478,000,000 | $=$ | 891,000,000 | $=$ |
| $3.74 \times 10^{7}$ | $=$ | $3.769 \times 10^{5}$ | $=$ |
| $5.2 \times 10^{8}$ | $=$ | $1.6 \times 10^{5}$ | $=$ |
| $4.37 \times 10^{3}$ | $=$ | 24,300,000 | $=$ |
| 489,000,000 | $=$ | 89,900 | $=$ |

## Scientific Notation (C) Answers

Convert between scientific notation and ordinary numbers.

| 802,000,000 | $=$ | $8.02 \times 10^{8}$ | $7.4 \times 10^{3}$ | $=$ | 7,400 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 140,000,000 | $=$ | $1.4 \times 10^{8}$ | 41,700,000 | $=$ | $4.17 \times 10^{7}$ |
| $4.9 \times 10^{4}$ | $=$ | 49,000 | $7.879 \times 10^{3}$ | $=$ | 7,879 |
| 37,000,000 | $=$ | $3.7 \times 10^{7}$ | $5.659 \times 10^{5}$ | $=$ | 565,900 |
| 14,850,000 | $=$ | $1.485 \times 10^{7}$ | $8.334 \times 10^{3}$ | $=$ | 8,334 |
| 478,000,000 | $=$ | $4.78 \times 10^{8}$ | 891,000,000 | $=$ | $8.91 \times 10^{8}$ |
| $3.74 \times 10^{7}$ | $=$ | 37,400,000 | $3.769 \times 10^{5}$ | $=$ | 376,900 |
| $5.2 \times 10^{8}$ | $=$ | 520,000,000 | $1.6 \times 10^{5}$ | $=$ | 160,000 |
| $4.37 \times 10^{3}$ | $=$ | 4,370 | 24,300,000 | $=$ | $2.43 \times 10^{7}$ |
| 489,000,000 | $=$ | $4.89 \times 10^{8}$ | 89,900 | $=$ | $8.99 \times 10^{4}$ |

## Scientific Notation (D)

Convert between scientific notation and ordinary numbers.

| $6.66 \times 10^{6}$ | $=$ | $5.2 \times 10^{5}$ | $=$ |
| :---: | :---: | :---: | :---: |
| $7.746 \times 10^{7}$ | $=$ | $1.92 \times 10^{6}$ | $=$ |
| 360,000 | $=$ | 602,200,000 | $=$ |
| $5.5 \times 10^{4}$ | $=$ | 63,000 | $=$ |
| 7,360,000 | $=$ | $8.865 \times 10^{7}$ | $=$ |
| 626,000 | $=$ | $4.736 \times 10^{6}$ | $=$ |
| 8,000 | $=$ | $3.6 \times 10^{7}$ | = |
| $6 \times 10^{8}$ | $=$ | $4.83 \times 10^{5}$ | $=$ |
| $4.6 \times 10^{4}$ | $=$ | 69,900 | $=$ |
| 46,500 | $=$ | 510,000 | $=$ |

## Scientific Notation (D) Answers

Convert between scientific notation and ordinary numbers.

$$
\begin{aligned}
& 6.66 \times 10^{6}=6,660,000 \\
& 5.2 \times 10^{5}=520,000 \\
& 7.746 \times 10^{7}=77,460,000 \quad 1.92 \times 10^{6}=1,920,000 \\
& 360,000=3.6 \times 10^{5} \quad 602,200,000=6.022 \times 10^{8} \\
& 5.5 \times 10^{4}=55,000 \\
& 7,360,000=7.36 \times 10^{6} \quad 8.865 \times 10^{7}=88,650,000 \\
& 626,000=6.26 \times 10^{5} \\
& 4.736 \times 10^{6}=4,736,000 \\
& 8,000=8 \times 10^{3} \\
& 3.6 \times 10^{7}=36,000,000 \\
& 6 \times 10^{8}=600,000,000 \\
& 4.83 \times 10^{5}= \\
& \text { 483,000 } \\
& 4.6 \times 10^{4}=46,000 \\
& 69,900=6.99 \times 10^{4} \\
& 46,500=4.65 \times 10^{4} \\
& \text { 510,000 = } \\
& 5.1 \times 10^{5}
\end{aligned}
$$

## Scientific Notation (E)

Convert between scientific notation and ordinary numbers.

$$
\begin{array}{ccc}
376,000 & = & 4,300 \\
& = & = \\
9.9 \times 10^{8} & = & 4.1 \times 10^{7}
\end{array}=
$$

## Scientific Notation (E) Answers

Convert between scientific notation and ordinary numbers.

$$
\begin{aligned}
& 376,000=3.76 \times 10^{5} \quad 4,300=4.3 \times 10^{3} \\
& 9.9 \times 10^{8}=990,000,000 \\
& 4.1 \times 10^{7}=41,000,000 \\
& 2.7 \times 10^{6}=2,700,000 \\
& 3.82 \times 10^{3}=3,820 \\
& 2.447 \times 10^{3}=2,447 \\
& 6.25 \times 10^{4}=62,500 \\
& 334,000,000=3.34 \times 10^{8} \quad 2.154 \times 10^{4}=21,540 \\
& 32,730=3.273 \times 10^{4} \\
& 5.2 \times 10^{5}=520,000 \\
& 1,300,000=1.3 \times 10^{6} \\
& 7,100,000=7.1 \times 10^{6} \\
& 412,300,000=4.123 \times 10^{8} \\
& 5.3 \times 10^{3}=5,300 \\
& 9.08 \times 10^{7}=90,800,000 \\
& 1,670=1.67 \times 10^{3} \\
& 8.91 \times 10^{8}=891,000,000 \\
& 6.203 \times 10^{3}= \\
& \text { 6,203 }
\end{aligned}
$$

## Scientific Notation (F)

Convert between scientific notation and ordinary numbers.

| $3.286 \times 10^{6}$ | $=$ | 6,000,000 | $=$ |
| :---: | :---: | :---: | :---: |
| $3.9 \times 10^{4}$ | $=$ | 67,530,000 | $=$ |
| 429,700 | $=$ | 2,474 | $=$ |
| $7.373 \times 10^{6}$ | $=$ | 963,300,000 | $=$ |
| 6,670 | $=$ | $1.658 \times 10^{8}$ | $=$ |
| 503,600 | $=$ | $6.8 \times 10^{4}$ | $=$ |
| $8.6 \times 10^{6}$ | $=$ | $5.44 \times 10^{7}$ | $=$ |
| 19,000 | $=$ | 1,600 | $=$ |
| 530,700 | $=$ | 883,700 | $=$ |
| $7.8 \times 10^{7}$ | $=$ | 8,830 | $=$ |

## Scientific Notation (F) Answers

Convert between scientific notation and ordinary numbers.

| $3.286 \times 10^{6}$ | $=$ | 3,286,000 | 6,000,000 | $=$ | $6 \times 10^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $3.9 \times 10^{4}$ | $=$ | 39,000 | 67,530,000 | $=$ | $6.753 \times 10^{7}$ |
| 429,700 | $=$ | $4.297 \times 10^{5}$ | 2,474 | $=$ | $2.474 \times 10^{3}$ |
| $7.373 \times 10^{6}$ | $=$ | 7,373,000 | 963,300,000 | $=$ | $9.633 \times 10^{8}$ |
| 6,670 | $=$ | $6.67 \times 10^{3}$ | $1.658 \times 10^{8}$ | $=$ | 165,800,000 |
| 503,600 | = | $5.036 \times 10^{5}$ | $6.8 \times 10^{4}$ | $=$ | 68,000 |
| $8.6 \times 10^{6}$ | $=$ | 8,600,000 | $5.44 \times 10^{7}$ | $=$ | 54,400,000 |
| 19,000 | $=$ | $1.9 \times 10^{4}$ | 1,600 | $=$ | $1.6 \times 10^{3}$ |
| 530,700 | $=$ | $5.307 \times 10^{5}$ | 883,700 | $=$ | $8.837 \times 10^{5}$ |
| $7.8 \times 10^{7}$ | $=$ | 78,000,000 | 8,830 | $=$ | $8.83 \times 10^{3}$ |

$7.8 \times 10^{7}=78,000,000 \quad 8,830=8.83 \times 10^{3}$

## Scientific Notation (G)

Convert between scientific notation and ordinary numbers.

| $9.344 \times 10^{5}$ | $=$ | 102,000 | $=$ |
| :---: | :---: | :---: | :---: |
| 5,294,000 | $=$ | $2.243 \times 10^{7}$ | $=$ |
| 9,500 | $=$ | $1 \times 10^{3}$ | $=$ |
| 10,000,000 | $=$ | $5.76 \times 10^{4}$ | $=$ |
| 6,560 | $=$ | $3.8 \times 10^{7}$ | $=$ |
| $4.8 \times 10^{3}$ | $=$ | 49,300 | $=$ |
| 60,000,000 | $=$ | 2,060,000 | $=$ |
| $6.27 \times 10^{4}$ | $=$ | $4.49 \times 10^{5}$ | $=$ |
| $5.834 \times 10^{5}$ | $=$ | 5,100,000 | $=$ |
| $8.5 \times 10^{4}$ | $=$ | 802,100,000 | $=$ |

## Scientific Notation (G) Answers

Convert between scientific notation and ordinary numbers.

| $9.344 \times 10^{5}$ | $=$ | 934,400 | 102,000 | $=$ | $1.02 \times 10^{5}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5,294,000 | $=$ | $5.294 \times 10^{6}$ | $2.243 \times 10^{7}$ | $=$ | 22,430,000 |
| 9,500 | $=$ | $9.5 \times 10^{3}$ | $1 \times 10^{3}$ | $=$ | 1,000 |
| 10,000,000 | $=$ | $1 \times 10^{7}$ | $5.76 \times 10^{4}$ | $=$ | 57,600 |
| 6,560 | $=$ | $6.56 \times 10^{3}$ | $3.8 \times 10^{7}$ | $=$ | 38,000,000 |
| $4.8 \times 10^{3}$ | $=$ | 4,800 | 49,300 | $=$ | $4.93 \times 10^{4}$ |
| 60,000,000 | $=$ | $6 \times 10^{7}$ | 2,060,000 | $=$ | $2.06 \times 10^{6}$ |
| $6.27 \times 10^{4}$ | $=$ | 62,700 | $4.49 \times 10^{5}$ | $=$ | 449,000 |
| $5.834 \times 10^{5}$ | $=$ | 583,400 | 5,100,000 | $=$ | $5.1 \times 10^{6}$ |
| $8.5 \times 10^{4}$ | $=$ | 85,000 | 802,100,000 | $=$ | $8.021 \times 10^{8}$ |

## Scientific Notation (H)

Convert between scientific notation and ordinary numbers.

| $6.22 \times 10^{5}$ | $=$ | $6.91 \times 10^{7}$ | $=$ |
| :---: | :---: | :---: | :---: |
| 8,447,000 | $=$ | 57,100 | $=$ |
| $2.145 \times 10^{8}$ | $=$ | 230,000,000 | $=$ |
| 5,860,000 | $=$ | 590,000 | $=$ |
| 5,780,000 | $=$ | $7.284 \times 10^{8}$ | $=$ |
| 902,000 | $=$ | $7.25 \times 10^{3}$ | = |
| $9.2 \times 10^{6}$ | $=$ | 813,700,000 | $=$ |
| 5,400 | $=$ | 6,966 | $=$ |
| $3.9 \times 10^{4}$ | $=$ | $4.7 \times 10^{7}$ | $=$ |
| $4.278 \times 10^{4}$ | $=$ | 522,600 | $=$ |

## Scientific Notation (H) Answers

Convert between scientific notation and ordinary numbers.

$$
\begin{aligned}
& 6.22 \times 10^{5}=622,000 \\
& 8,447,000=8.447 \times 10^{6} \\
& 57,100=5.71 \times 10^{4} \\
& 2.145 \times 10^{8}=214,500,000 \\
& 230,000,000= \\
& 2.3 \times 10^{8} \\
& 5,860,000=5.86 \times 10^{6} \\
& 590,000=5.9 \times 10^{5} \\
& 5,780,000=5.78 \times 10^{6} \quad 7.284 \times 10^{8}=728,400,000 \\
& 902,000=9.02 \times 10^{5} \\
& 7.25 \times 10^{3}=7,250 \\
& 9.2 \times 10^{6}=9,200,000 \\
& \text { 813,700,000 = } \\
& 8.137 \times 10^{8} \\
& \text { 5,400 } \\
& =\quad 5.4 \times 10^{3} \\
& \text { 6,966 } \\
& =6.966 \times 10^{3} \\
& 3.9 \times 10^{4}=39,000 \\
& 4.7 \times 10^{7}=47,000,000 \\
& 4.278 \times 10^{4}=42,780 \\
& 522,600=5.226 \times 10^{5}
\end{aligned}
$$

## Scientific Notation (I)

Convert between scientific notation and ordinary numbers.

| $8.8 \times 10^{8}$ | $=$ | 600,000 | $=$ |
| :---: | :---: | :---: | :---: |
| 28,600,000 | $=$ | $6.09 \times 10^{4}$ | $=$ |
| $5.68 \times 10^{6}$ | $=$ | 5,497,000 | $=$ |
| $6 \times 10^{4}$ | $=$ | $7.657 \times 10^{5}$ | $=$ |
| $7.873 \times 10^{7}$ | = | 801,000,000 | $=$ |
| 48,000 | $=$ | $2.931 \times 10^{5}$ | $=$ |
| 64,000 | $=$ | $2.1 \times 10^{6}$ | $=$ |
| $7.9 \times 10^{8}$ | $=$ | 7,700,000 | = |
| $2.2 \times 10^{8}$ | $=$ | $6.84 \times 10^{8}$ | $=$ |
| 61,000 | = | 8,180,000 | $=$ |

## Scientific Notation (I) Answers

Convert between scientific notation and ordinary numbers.

$$
\begin{aligned}
& 8.8 \times 10^{8}=880,000,000 \quad 600,000=6 \times 10^{5} \\
& 28,600,000=2.86 \times 10^{7} \\
& 6.09 \times 10^{4}=60,900 \\
& 5.68 \times 10^{6}=5,680,000 \quad 5,497,000=5.497 \times 10^{6} \\
& 6 \times 10^{4}=60,000 \quad 7.657 \times 10^{5}=765,700 \\
& 7.873 \times 10^{7}=78,730,000 \quad 801,000,000=8.01 \times 10^{8} \\
& 48,000=4.8 \times 10^{4} \\
& 2.931 \times 10^{5}=293,100 \\
& 64,000=6.4 \times 10^{4} \\
& 2.1 \times 10^{6}=2,100,000 \\
& 7.9 \times 10^{8}=790,000,000 \quad 7,700,000=7.7 \times 10^{6} \\
& 2.2 \times 10^{8}=220,000,000 \\
& 6.84 \times 10^{8}=684,000,000 \\
& 61,000=6.1 \times 10^{4} \\
& 8,180,000=8.18 \times 10^{6}
\end{aligned}
$$

## Scientific Notation (J)

Convert between scientific notation and ordinary numbers.

| $3.52 \times 10^{6}$ | $=$ | $9.8 \times 10^{5}$ | $=$ |
| :---: | :---: | :---: | :---: |
| 2,600,000 | $=$ | 470,000,000 | $=$ |
| 5,400,000 | $=$ | 7,100 | $=$ |
| 7,320 | $=$ | $9.26 \times 10^{7}$ | $=$ |
| $5.49 \times 10^{7}$ | $=$ | $2.6 \times 10^{8}$ | $=$ |
| 38,000 | $=$ | $4.7 \times 10^{6}$ | $=$ |
| $4.446 \times 10^{5}$ | $=$ | 8,200,000 | $=$ |
| 596,600 | $=$ | 19,000,000 | $=$ |
| $4.09 \times 10^{6}$ | $=$ | $8.88 \times 10^{8}$ | $=$ |
| 4,670,000 | $=$ | $3.446 \times 10^{5}$ | $=$ |

## Scientific Notation (J) Answers

Convert between scientific notation and ordinary numbers.

$$
\begin{aligned}
& 3.52 \times 10^{6}=3,520,000 \quad 9.8 \times 10^{5}=980,000 \\
& 2,600,000=2.6 \times 10^{6} \\
& 470,000,000=4.7 \times 10^{8} \\
& 5,400,000=5.4 \times 10^{6} \\
& \text { 7,100 } \\
& =\quad 7.1 \times 10^{3} \\
& 7,320=7.32 \times 10^{3} \\
& 9.26 \times 10^{7}=92,600,000 \\
& 5.49 \times 10^{7}=54,900,000 \quad 2.6 \times 10^{8}=260,000,000 \\
& 38,000=3.8 \times 10^{4} \\
& 4.7 \times 10^{6}=4,700,000 \\
& 4.446 \times 10^{5}=444,600 \\
& 8,200,000= \\
& 8.2 \times 10^{6} \\
& 596,600=5.966 \times 10^{5} \\
& 19,000,000=1.9 \times 10^{7} \\
& 4.09 \times 10^{6}=4,090,000 \\
& 8.88 \times 10^{8}=888,000,000 \\
& 4,670,000=4.67 \times 10^{6} \quad 3.446 \times 10^{5}=344,600
\end{aligned}
$$

