

Extra Math Help is at Hand!!!

Scientific Notation: Be sure to read and visit the links on the Math & Measurement Reference Sheet at sgbscience.com. Then do these problems on a separate sheet of paper.

1. Write out longhand: 4.3×10^{-4}
2. Write out longhand: 2×10^1
3. Write out longhand: 2×10^{-1}
4. Write out longhand: 8.5×10^5
5. Write out longhand: 3.09×10^{-2}
6. Write in scientific notation: 85,000
7. Write in scientific notation: 0.000302
8. Write in scientific notation: 0.0401
9. Write in scientific notation: 3,750,000
10. Write in scientific notation: 8
11. Calculate and report the answer in scientific notation with the right number of significant figures:
 - a. $5.3 \times 10^{-3} \div 8.2 \times 10^{-4}$
 - b. $6.5 \times 10^4 \times 1.2 \times 10^{-2}$
 - c. $3.1 \times 10^{-9} \div 6.0 \times 10^{-6}$
 - d. $7.30 \times 10^{-1} + 8.0 \times 10^{-1}$

Answers:

1. 0.00043
2. 20
3. 0.2
4. 850,000
5. 0.0309
6. 8.5×10^4
7. 3.02×10^{-4}
8. 4.01×10^{-2}
9. 3.75×10^6
10. 8×10^0
11. Calculations:
 - a. 6.4 or 6.4×10^0
 - b. 780 or 7.8×10^2
 - c. 0.00052 or 5.2×10^{-4}
 - d. 1.5 or 1.5×10^0

Conversion Help: Be sure to read and visit the links on the Math & Measurement Reference Sheet at sgbscience.com. Then do these problems on a separate sheet of paper.

1. Convert 1300 seconds to minutes.
2. Convert 1300 seconds to hours.
3. Convert. 1.2 years to seconds.

4. Convert 10 m to km.
5. Convert 1.2 m to mm.
6. Convert 42 km to m.
7. Convert 10m/s to km/s.
8. Convert 10m/s to m/hr.
9. Convert 10m/s to km/hr. (Hint: Do the steps from question seven and then question eight.)
10. Convert 150km/hr to m/s. (Hint: This is similar but not identical to question nine. You will do two steps.)

Answers: (Note that answers have the correct number of significant figures and are written in scientific notation when the answers have a lot of digits.)

1. 22 minutes
2. 0.36 hours
3. 37,000,000 s or (more appropriately) 3.7×10^7 s
4. 0.01 km or 1×10^{-2} km
5. 1200 mm or 1.20×10^3 mm
6. 42,000 m or 4.2×10^4 m
7. 0.01 km/s or 1×10^{-2} km/s
8. 36,000 m/hr or 3.6×10^3 m/hr
9. 36 km/hr
10. 42 m/s

Algebra help: Be sure to read and visit the links on the Math & Measurement Reference Sheet at sgbscience.com. Then do these problems on a separate sheet of paper.

1. $85v + 9 = 62v - 3$
2. $2x^2/7 + 65 = 317$
3. If $a = 3$ and $b = 7.2$, solve for c : $a^2 + b^2 = c^2$
4. $5 - (x+2) = 10$
5. $4x = 7 + 3x$
6. $2x = 14 + 3(x-12)$
7. $2(3x+5) = 20$
8. $10(2x - 7) = 90$
9. $13(y + 4) - 8(3y - 2) = 14(3y + 12)$
10. $5(-3x - 2) - (x - 3) = -4(4x + 5) + 13$