CHEM 101
Scientific notation worksheet

Convert to correct scientific notation:

1. 0.00102

2. $632 \times 10^5$

3. 137,000

4. $0.006 \times 10^0$

5. $490 \times 10^{-6}$

Convert to standard numbers:

6. $5.6 \times 10^2$

7. $9.03 \times 10^{-4}$

Do the calculations and express the number in correct scientific notation:

8. $3.20 \times 10^2 + 5.60 \times 10^3$

9. $9.56 \times 10^{-4} - 8.23 \times 10^{-5}$

10. $(3.2 \times 10^2) (4.1 \times 10^4)$

11. $(6.3 \times 10^{-1}) / (5.4 \times 10^{-4})$

12. $\dfrac{4.82 \times 10^{-2}}{(1.2 \times 10^4) ( 9.6 \times 10^2)}$

Answers:

| | | | |
|---|---|---|---|
| 1. | $1.02 \times 10^{-3}$ | 9. | $8.74 \times 10^{-4}$ |
| 2. | $6.32 \times 10^7$ | 10. | $1.3 \times 10^7$ |
| 3. | $1.37 \times 10^5$ | 11. | $1.2 \times 10^3$ |
| 4. | $6 \times 10^{-3}$ | 12. | $4.2 \times 10^{-9}$ |
| 5. | $4.9 \times 10^{-4}$ | | |
| 6. | 560 | | |
| 7. | 0.000903 | | |
| 8. | $5.92 \times 10^3$ | | |