

Standard Form

1. Write the following numbers in standard form:

- | | | |
|---------------|--------------|----------------|
| a. 3200 | b. 760 | c. 4730 |
| d. 9300 | e. 12 600 | f. 83 460 |
| g. 48 455 | h. 2 500 100 | i. 43002 |
| j. 66 010 000 | k. 812 000 | l. 700 000 000 |

2. Write the following numbers in standard form:

- | | | |
|------------|------------------|---------------|
| a. 0.003 | b. 0.00056 | c. 0.0000006 |
| d. 0.0348 | e. 0.000042 | f. 0.00005401 |
| g. 0.00521 | h. 0.00000326 | i. 0.00400032 |
| j. 0.56 | k. 0.00000040002 | l. 0.00004802 |

3. Convert the following into normal numbers:

- | | | |
|---------------------------|---------------------------|----------------------------|
| a. 2×10^3 | b. 7.4×10^2 | c. 1.835×10^5 |
| d. 4.4×10^6 | e. 3.0012×10^4 | f. 5.8302×10^7 |
| g. 1.276×10^{-3} | h. 5.1×10^{-2} | i. 2.74×10^{-5} |
| j. 9.83×10^{-6} | k. 5.001×10^{-4} | l. 1.076×10^{-10} |

4. A water molecule is about 0.00000000027 metres wide. DNA is about 0.000000002 metres wide.

Convert these into standard form.

Which is widest?

5. Sophie converts 0.00027 into standard form. She gets an answer of 27×10^{-5} .

What mistake has she made?

What is the correct answer?