Standard Form

1. Write the number 5,600,000 in standard form.
2. Express 0.00043 in standard form.
3. The mass of the Earth is approximately 5,970,000,000,000,000,000,000,000 kg. Write this number in standard form.
4. Convert the standard form 3.2×10^7 to an ordinary number.
5. Rewrite 0.0000089 in standard form.
6. A bacterium measures 2.5×10^{-6} metres in length. Write this number in ordinary form.
7. Express the number 420,000 in standard form.
8. Simplify and write your answer in standard form: $(4 \times 10^3) + (3 \times 10^2)$
9. Calculate $(6 \times 10^5) \times (2 \times 10^3)$ and write your answer in standard form.
10. The distance from the Earth to the Sun is about 1.496×10^8 km. Write this number as an ordinary number.
11. Write the number 0.00015 in standard form.
12. Express 7.5×10^4 as an ordinary number.
13. The population of a city is 3,200,000. Write this number in standard form.
14. Simplify and write your answer in standard form: $(2 \times 10^4) + (8 \times 10^3)$
15. Convert 9.1×10^{-3} to an ordinary number.
16. The mass of a virus is 4.2×10^{-18} grams. Write this number as an ordinary number.

Answer Key

1. 5.6×10^{6}
2. 4.3×10^{-4}
3. 5.97×10^{24}
4. 32,000,000
5. 8.9×10^{-6}
6. 0.0000025 metres
7. 4.2×10^{5}
8. $(4 \times 10^{3}) + (3 \times 10^{2}) = 4000 + 300 = 4300 = 4.3 \times 10^{3}$
9. $(6 \times 10^{5}) \times (2 \times 10^{3}) = 12 \times 10^{8} = 1.2 \times 10^{9}$
10. 149,600,000 km
11. 1.5×10^{-4}
12. 75,000
13. 3.2×10^{6}
14. $(2 \times 10^{4}) + (8 \times 10^{3}) = 20{,}000 + 8{,}000 = 28{,}000 = 2.8 \times 10^{4}$
15. 0.0091
16. 0.00000000000000042 grams