

Why Were the Bones Chasing the Skull?



Write the letter of each exercise in the box containing the number of the answer.

Write the number in scientific notation.

E. 5,900,000,000,000 mi (distance that light travels in one year)

$$5.9 \times 10^{12}$$

17. 5.9×10^{12} mi

20. 5.9×10^{11} mi

T. 6,020,000,000,000,000,000,000,000,000 kg (mass of the earth)

$$6.02 \times 10^{24}$$

10. 6.02×10^{22} kg

9. 6.02×10^{24} kg

A. 0.000000000128 m (wavelength of one type of X ray)

$$1.28 \times 10^{-10}$$

15. 1.28×10^{-9} m

24. 1.28×10^{-10} m

H. 0.000000000000000000000000000000091 g (mass of an electron)

$$9.1 \times 10^{-28}$$

7. 9.1×10^{-29} g

2. 9.1×10^{-28} g

Write the number in scientific notation.

O. 72.5×10^5

A. 0.725×10^5

20. 7.25×10^4

14. 7.25×10^6

E. 38.3×10^{-4}

T. 0.383×10^{-4}

1. 3.83×10^{-5}

10. 3.83×10^{-3}

Express each factor in scientific notation, then multiply. Express the product in scientific notation.

A. $(15,000,000,000)(400,000)$

$$1.5 \times 10^{10} \times 4.0 \times 10^5 = 6 \times 10^{15}$$

16. 6×10^{16}

7. 6×10^{15}

D. $(3,800,000,000)(0.000005)$

$$(3.8 \times 10^9)(5.0 \times 10^{-6}) = 1.9 \times 10^4$$

25. 1.9×10^4

6. 1.9×10^3

E. $(0.000000022)(0.0045)$

$$(2.2 \times 10^{-8})(4.5 \times 10^{-3}) = 9.9 \times 10^{-11}$$

3. 9.9×10^{-11}

11. 9.9×10^{-10}

T. $(0.000000000076)(90,000,000)$

$$(7.6 \times 10^{-11})(9.0 \times 10^7) = 6.84 \times 10^{-3}$$

4. 6.84×10^{-5}

18. 6.84×10^{-3}

Express each number in scientific notation, then divide. Express the quotient in scientific notation.

D. $\frac{91,000,000,000,000}{700,000}$

$$= \frac{9.1 \times 10^{13}}{7.0 \times 10^5} = 1.3 \times 10^8$$

11. 1.3×10^8

22. 1.3×10^7

Y. $\frac{16,000}{2,500,000,000}$

$$= \frac{1.6 \times 10^4}{2.5 \times 10^9} = 6.4 \times 10^{-6}$$

14. ~~1.6 \times 10^{-6}~~

4. 6.4×10^{-6}

T. $\frac{630,000,000}{0.00018}$

$$= \frac{6.3 \times 10^8}{1.8 \times 10^{-4}} = 3.5 \times 10^{12}$$

13. 3.5×10^{12}

8. 3.5×10^4

W. $\frac{0.00232}{0.00000058}$

$$= \frac{2.3 \times 10^{-3}}{5.8 \times 10^{-7}} = 4 \times 10^5$$

12. 4×10^5

6. 4×10^3

Fill in the blank in each statement comparing these four numbers.

~~$a = 3.3 \times 10^4$~~ ~~$b = 3.3 \times 10^5$~~ ~~$c = 3.3 \times 10^8$~~ ~~$d = 3.3 \times 10^4$~~

H. ~~b is _____ times larger than a .~~

N. ~~c is _____ times larger than b .~~

E. ~~c is _____ times larger than a .~~

G. ~~d is _____ times larger than a .~~

~~16. 2~~ ~~8. 1000~~

~~22. 10~~ ~~23. 10,000~~

~~15. 100~~ ~~19. 100,000~~

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
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