

# Operations with Scientific Notation

Perform each operation. Write your answer in **SCIENTIFIC NOTATION!!**

$$1. (2 \times 10^4) + (5 \times 10^4)$$

$$7 \times 10^4$$

$$2. (3.5 \times 10^{-3}) + (1 \times 10^{-3})$$

$$4.5 \times 10^{-3}$$

$$3. (8.3 \times 10^{-5}) - (4.4 \times 10^{-5})$$

$$3.9 \times 10^{-5}$$

$$4. (7.2 \times 10^9) - (5.8 \times 10^9)$$

$$1.4 \times 10^9$$

$$5. (7.4 \times 10^{-6}) + (5 \times 10^{-6})$$

$$12.4 \times 10^{-6+1} = 1.24 \times 10^{-5}$$

$$6. (7.13 \times 10^{12}) + (8.04 \times 10^{12})$$

$$15.17 \times 10^{12+1} = 1.517 \times 10^{13}$$

$$7. (1.4 \times 10^2) - (1.1 \times 10^2)$$

$$0.3 \times 10^{2-1} = 3 \times 10^1$$

$$8. (5.2 \times 10^{-4}) - (4.58 \times 10^{-4})$$

$$0.62 \times 10^{-4-1} = 6.2 \times 10^{-5}$$

$$9. (6.4 \times 10^{-2}) + (4.7 \times 10^{-3})$$

$$6.4 \times 10^{-2} + 0.47 \times 10^{-2} \\ 6.87 \times 10^{-2}$$

$$10. (5.92 \times 10^{14}) - (3 \times 10^{12})$$

$$5.92 \times 10^{14} - 0.03 \times 10^{14} \\ 5.89 \times 10^{14}$$

$$11. (3 \times 10^7) \times (1 \times 10^2)$$

$$3 \times 10^9$$

$$12. (4 \times 10^{-3}) \times (5 \times 10^6)$$

$$20 \times 10^{3+1} = 2 \times 10^4$$

$$13. (6 \times 10^{-12}) \times (7 \times 10^{-9})$$

$$42 \times 10^{-21+1} = 4.2 \times 10^{-20}$$

$$14. (8 \times 10^5) \times (8 \times 10^5)$$

$$64 \times 10^{10+1} = 6.4 \times 10^{11}$$

$$15. (2 \times 10^{-3}) \times (1.1 \times 10^2)$$

$$2.2 \times 10^{-1}$$

$$16. (9 \times 10^{-7}) \times (2.5 \times 10^3)$$

$$22.5 \times 10^{-4+1} = 2.25 \times 10^{-3}$$

$$17. (8 \times 10^5) \div (4 \times 10^5)$$

$$2 \times 10^0$$

$$18. (9 \times 10^7) \div (3 \times 10^2)$$

$$3 \times 10^5$$

$$19. (8.4 \times 10^{-4}) \div (2.1 \times 10^{-6})$$

$$4 \times 10^2$$

$$20. (7.5 \times 10^{-5}) \div (3 \times 10^{-3})$$

$$2.5 \times 10^{-2}$$

$$21. (2.3 \times 10^6) \div (4.6 \times 10^{-9})$$

$$0.5 \times 10^{15-1} = 5 \times 10^{14}$$

$$22. (6.8 \times 10^{-14}) \div (8.5 \times 10^{10})$$

$$0.8 \times 10^{-24-1} = 8 \times 10^{-25}$$