

Orders of Operations and Powers of Ten

Name _____

Date _____

Solve the expressions.

$$\begin{aligned} 1. \quad & (9 + 4) \times 2 = \\ & 13 \times 2 \\ & 26 \end{aligned}$$

$$\begin{aligned} 2. \quad & 3 \times (9 - 4) \\ & 3 \times 5 \\ & 15 \end{aligned}$$

$$\begin{aligned} 3. \quad & 5^2 - (4 \times 3 - 6) \\ & 5^2 - (12 - 6) \\ & 5^2 - 6 \\ & 25 - 6 \\ & 19 \end{aligned}$$

$$\begin{aligned} 4. \quad & (6 \times 9) - (12 - 3^3) \\ & 54 - (12 - 3^3) \\ & 54 - (12 - 9) \\ & 54 - 3 \\ & 51 \end{aligned}$$

$$\begin{aligned} 5. \quad & 5 \times 4 - 3 + 2 \\ & 20 - 3 + 2 \\ & 17 + 2 \\ & 19 \end{aligned}$$

$$\begin{aligned} 6. \quad & 3 \times (6 \div 2) + 2 \\ & 3 \times 3 + 2 \\ & 9 + 2 \\ & 11 \end{aligned}$$

$$\begin{aligned} 7. \quad & 54 \div 3^2 + 5 \times 6 \\ & 54 \div 9 + 5 \times 6 \\ & 6 + 5 \times 6 \\ & 6 + 30 \\ & 36 \end{aligned}$$

$$\begin{aligned} 8. \quad & [7 \times (8 - 3)] + 6 \times 2 \\ & [7 \times 5] + 6 \times 2 \\ & 35 + 6 \times 2 \\ & 35 + 12 \\ & 47 \end{aligned}$$

$$\begin{aligned} 9. \quad & 9 \div 3 + 2 \times 9 \\ & 3 + 2 \times 9 \\ & 3 + 18 \\ & 21 \end{aligned}$$

$$\begin{aligned} 10. \quad & (6^2 + 4) \div 2 \\ & (36 + 4) \div 2 \\ & 40 \div 2 \\ & 20 \end{aligned}$$

11. 5×10^3

5×1000

5000

12. $5 \times 10 + 4 \times 1 + 4 \times (1/100)$

$50 + 4 + 0.04$

54.04

13. 6×10^2

6×100

600

14. $\{[(6+2) \times 3] \div 8\} + 6^2$

$\{[8 \times 3] \div 8\} + 6^2$

$\{24 \div 8\} + 6^2$

$3 + 6^2$

$3 + 36$

39

Write the expression and solve.

15. Subtract 2 from 8 then multiply by 4

$$4 \times (8-2) \quad \text{or} \quad (8-2) \times 4$$

$$4 \times 6 \qquad \qquad \qquad 6 \times 4$$

$$24 \qquad \qquad \qquad 24$$

16. 6 more than the product of 3 times 2

$$6 + (3 \times 2) \quad \text{or} \quad 3 \times 2 + 6$$

$$6 + 6 \qquad \qquad \qquad 6 + 6$$

$$12 \qquad \qquad \qquad 12$$

17. One fourth the size of 10 times 2

$$10 \times 2 \div 4$$

$$20 \div 4$$

$$5$$

18. Eight times the size of the product of 4 and 2

$$8 \times (4 \times 2) \quad \text{or} \quad 4 \times 2 \times 8$$

$$8 \times 8 \qquad \qquad \qquad 8 \times 8$$

$$64 \qquad \qquad \qquad 64$$

19. One half the size of 5 and 9

$$(5+9) \div 2$$

$$14 \div 2$$

$$7$$

20. Three times the difference of 9 and 6

$$3 \times (9-6) \quad \text{or} \quad (9-6) \times 3$$

$$3 \times 3 \qquad \qquad \qquad 3 \times 3$$

$$9 \qquad \qquad \qquad 9$$