Name: **School:** **Grade:** **Class:**

1-4 Order of Operations - Practice and Problem Solving

Find the value of each expression.

9. $9 + 12 - 15$

$$\begin{aligned} 9+12-15 &= 21-15 \\ &= 6 \end{aligned}$$

11. $22 - 17 + 8$

$$\begin{aligned} 22-17+8 &= 5+8 \\ &= 13 \end{aligned}$$

13. $(9 + 2) \times 6 - 5$

$$\begin{aligned} (9+2)\times 6-5 &= 11\times 6-5 \\ &= 66-5 \\ &= 61 \end{aligned}$$

15. $66 \times (6 \div 2) + 1$

$$\begin{aligned} 66\times(6\div 2)+1 &= 66\times 3+1 \\ &= 198+1 \\ &= 199 \end{aligned}$$

17. $55 \div 11 + 7 \times (2 + 14)$

$$\begin{aligned} 55\div 11+7\times(2+14) &= 55\div 11+7\times 16 \\ &= 5+7\times 16 \\ &= 5+112 \\ &= 117 \end{aligned}$$

19. $26 + 6^2 \div 4$

$$\begin{aligned} 26+6^2\div 4 &= 26+36\div 4 \\ &= 26+9 \\ &= 35 \end{aligned}$$

21. $22 \div 2 \times 3^2$

$$\begin{aligned} 22\div 2\times 3^2 &= 22\div 2\times 9 \\ &= 11\times 9 \\ &= 99 \end{aligned}$$

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23. **MOVIES** Tyree and four friends go to the movies. Each person buys a movie ticket for \$7, a snack for \$3, and a drink for \$2. Write an expression for the total cost of the trip to the movies. Then find the total cost.

cost of 5 tickets + cost of 5 snacks + cost of 5 drinks
$= 5 \times \$7 + 5 \times \$3 + 5 \times \$2$
$= \$35 + \$15 + 10$
$= \$60$

Find the value of each expression.

25. $12 \div 4 + (5^2 - 6)$

$$\begin{aligned} 12 \div 4 + (5^2 - 6) &= 12 \div 4 + (25 - 6) \\ &= 12 \div 4 + 19 \\ &= 3 + 19 \\ &= 22 \end{aligned}$$

27. $96 \div 4^2 + (25 \times 2) - 15 - 3$

$$\begin{aligned} 96 \div 4^2 + (25 \times 2) - 15 - 3 \\ &= 96 \div 4^2 + 50 - 15 - 3 \\ &= 96 \div 16 + 50 - 15 - 3 \\ &= 6 + 50 - 15 - 3 \\ &= 56 - 15 - 3 \\ &= 41 - 3 \\ &= 38 \end{aligned}$$

Write a numerical expression for each verbal expression. Then find its value.

29. the product of 7 and 6, minus 2

the product of 7 and 6, minus 2
$= 7 \times 6 - 2$
$= 42 - 2$
$= 40$

31. **CHALLENGE** Create an expression whose value is 10. It should contain four numbers and two different operations.

Sample answer: $25 \div 5 + 10 \div 2$

$$\begin{aligned} 25 \div 5 + 10 \div 2 &= 5 + 10 \div 2 \\ &= 5 + 5 \\ &= 10 \end{aligned}$$

Name: **School:** **Grade:** **Class:**

33. WRITING IN MATH Write a real-world problem that can be solved using order of operations. Then solve the problem.

Sample answer: At the basketball game, Jared made 7 field goals and 3 free throws. If field goals are two points and free throws are 1 point, find the total number of points Jared scored. 17

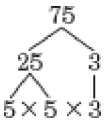
35. **PHONE TREE** Members of a certain phone tree are given 4 people to contact. If the phone tree is activated, the total number of calls made is 4^4. How many calls is this?

$4^4 = 4 \times 4 \times 4 \times 4$

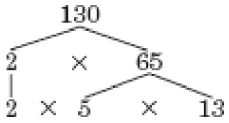
$= 256$

Find the prime factorization of each number

37. 75



39. 130



PREREQUISITE SKILL Add.

41. 23 + 16

$23 + 16 = 39$

43. 54 + 6

$54 + 6 = 60$