

Order of Operations

Simplify **both** columns. The partner A and B columns will have the same answers, allowing you to check. Show EVERY step you do.

Partner A	Partner B
$19 + 20 \div 4 \cdot 2 - 3^2$	$36 - 2 \cdot 4 + 5^2 - 3 \cdot 11$
$30 + (20 - 2 \cdot 5) \div 2 \cdot 9$	$80 - 20 \div 5 - (11 - 2 \cdot 5)$
$8^2 + 18 - 2(6 + 2) \div 4$	$100 - 4(7 + 3) \div 5 - 12$
$60 \div 3 \cdot 5 - (8 - 2)^2 + 8$	$12 \div 4 \cdot 2 - (9 - 6)^2 + 21$

Determine where to place parenthesis so that the expression simplifies or answers 25.

$$36 \div 4 + 2 \cdot 9 - 5 + 8$$

Determine where to place parenthesis so that the expression simplifies or answers 42.

$$60 - 20 \div 2 + 8 - 4^2$$

Error Analysis for Order of Operations.

Solve the first column (your work). Look at the second column (your friends work), you should have a different answer because your friends answer is wrong. In the third column, write what the mistake or error was that your friend made.

1. Your Work	2. Your friends work	3. What is the mistake?
$85 - 7 + 13 - 10$	$85 - 7 + 13 - 10$ $85 - 20 - 10$ $65 - 10$ 55	
$70 \div 5 \cdot 2 + 16 - 1$	$70 \div 5 \cdot 2 + 16 - 1$ $70 \div 10 + 16 - 1$ $7 + 16 - 1$ $23 - 1$ 22	
$25 + 6 \cdot 2 - (8 + 4) \div 4$	$25 + 6 \cdot 2 - (8 + 4) \div 4$ $25 + 12 - 8 + 4 \div 4$ $25 + 12 - 8 + 1$ $37 - 8 + 1$ $29 + 1$ 30	
$(24 - 10) + 3^2 \cdot 8$	$(24 - 10) + 3^2 \cdot 8$ $14 + 3^2 \cdot 8$ $14 + 6 \cdot 8$ $14 + 48$ 62	
$10 - 2 \cdot 5 + 4$	$10 - 2 \cdot 5 + 4$ $10 - 10 + 4$ $10 - 14$ 4	
$5 \cdot 4 - (4 + 3)$	$5 \cdot 4 - (4 + 3)$ $20 - 4 + 3$ $16 + 3$ 19	
$40 - [(6 + 2) \cdot (5 - 2)]$	$40 - [(6 + 2) \cdot (5 - 2)]$ $40 - [8 \cdot (5 - 2)]$ $40 - (40 - 2)$ $40 - 38$ 2	
$5 \cdot 100 - (2 + 3)$	$5 \cdot 100 - (2 + 3)$ $5 \cdot 100 - 5$ $5 \cdot 95$ 475	