Name:_____

Wednesday Homework Evaluating Expressions

#1-12

When finding the value of an expression with more than one operation, perform the operations in the order specified by the order of operations.

Order of Operations
1. Perform all operations within grouping symbols first; start with the innermost grouping symbols.
2. Evaluate all powers before other operations.
3. Multiply and divide in order from left to right.
4. Add and subtract in order from left to right.

Evaluate each expression.

1. $4 \times 5 + 8$

2. $16 - 12 \div 4$

3. $14 \div 2 + 3(5)$

4. $5 - 6 \times 2 \div 3$

5. $2 \cdot 3^2 + 10 - 14$

6. $2^2 + 32 \div 8 - 5$

7. $(10 + 5) \div 3$

8. $5^2 \cdot (8 - 6)$

9. $(17 - 5)(6 + 5)$

10. $3 + 7(14 - 8 \div 2)$

11. $5[24 - (6 + 8)]$

12. $\dfrac{14}{3^2 - 2}$

Challenge

Evaluate each expression if $a = 3$, $b = 5$, and $c = 6$.

13. $a + 3b$

14. $4b - 3c$

15. $2a - b + 5c$

16. $(ab)^2$

17. $a(b + c)$

18. $3(bc - 8) \div a$