Grade 5
Numerical Expressions
Concept review

1. **Which expression has a value of 20?**
   a. 3 x (6 + 2)
   b. (3 x 6) + 2
   c. 3 + (6 x 2)
   d. (3 + 6) x 2
2. **Ms. Ayesha gave these instructions to her math students.**
   Add 6 and 12.
   Multiply the result by 10.
   Which expression has the same final answer as in Ms. Ayesha's instructions?
   a. (6 x 12) + 10
   b. 6 + (12 x 10)
   c. (6 + 12) x 10
   d. 6 x (12 + 10)
3. **What is the correct way to simplify this expression?**

   6 x (12 + 3)
   a. Add 3 and 12, and then add that sum to 6.
   b. Add 3 and 12, and then multiply that sum by 6.
   c. Multiply 6 by 12, and then add 3 to that product.
   d. Multiply 6 by 12, and then multiply 6 by 3. Then find the difference between these two products.
4. **Which number goes in the blank to make the equation true?**

   (11 + 4) + 3 = (___ + 6) +2
   a. 8
   b. 10
   c. 11
   d. 15
5. **Meera wrote a problem for homework. The answer to her problem is 33.**
   Which problem did Meera write?
   a. 3 x (4 + 5) + 6 =
   b. (3 x 4) + 5 + 1 =
   c. 2 x 4 + (5 + 6) =
   d. 3 x 4 + 5 + 6 =

6. **Ms. Noora wrote these directions on the board.**

   Add 6 and 3
   Multiply the sum by 9.
   Subtract 4 from the product.

   Which expression represents Ms. Noora's directions?

   a. 6 + 3 x 9 - 4
   b. 6 + (3 x 9) - 4
   c. 6 + 3 x (9 - 4)
   d. (6 + 3) x 9 - 4

7. **How would you describe this pattern's rule?**
   65, 62, 59, 56, 53, 50

a. Subtract 2
b. Subtract 3
c. Subtract 4
d. Add 3

8. **What are the missing numbers in this pattern?**
   23, 33, ___, 53, ___, 73

   a. 32, 62
   b. 42, 63
   c. 43, 63
   d. 42, 62

9. **Huda's teacher gave the class a mystery pattern below to solve.**
   12, 16, 20, 24, ___
   What is the rule to get to the next number?

   a. Add 6
   b. Add 4
   c. Subtract 2
   d. Add 2

10. **Triple the sum of 33 and 27**

   a. (2x33)+27
   b. 3x(33+27)
   c. 13x(33-27)
   d. 3x(33-27)

11. Which numeric expression matches this written expression?

add four and nine and then multiply by six

a. (6-4)x9
b. (4+9)x6
c. 6x9+4
d. 9x4-6

12. Which numeric expression matches this written expression?

two times the sum of eight and seven

a. 2 x 87
b. 2 + (8 + 7)
c. 2 x 8 + 7
d. 2 x (8 + 7)

13. Find and explain the error.

5 - 3 + 2
5 - 5
0

a. There is no error.
b. Addition was done first and you should have subtracted first
c. There is a subtraction error

14. Which operation should be completed first?

[10x(6-2)÷5]

a. 10x6
b. 10x4
c. 6-2
d. 2÷5

15. What would be my first step? 3 + 4 x 6 - 4 =

a. addition
b. multiplication
c. subtraction
d. exponents

16. What does 3^2 mean?

a. 3 x 2
b. 3 x 3
c. 2 x 2 x 2