

Name _____

Assessment SOL 5.7 Order of Operations



1. Based on the order of operations, which shows the first step in simplifying this expression?

$$16 \div 2 + 6 (7 + 4 \times 5)$$

- ☐ A. $8 + 6(7+4 \times 5)$ ☐ B. $16 \div 8(7+4 \times 5)$ ☐ C. $16 \div 2 + 6(11 \times 5)$ ☐ D. $16 \div 2 + 6(7+20)$

2. Which is equivalent to the following?

$$32 - 14 + 26 - (81 \div 9) \cdot 2$$

- ☐ A. 26 ☐ B. 10 ☐ C. 70 ☐ D. 52

3. What is the value of the following expression? Write the answer in the box.

$$6+4(8 \times 5)$$

4. Which is NOT equivalent to the value of 22?

- ☐ A. $7 + (15 - 5) \times 3 \div 2$
☐ B. $(15-5) + 8 \times 2 - 4$
☐ C. $16 + 3 \times (15 - 5) \div 5$
☐ D. $3 \times 4 - 7 + (15 - 5)$

5. When simplifying the following using the order of operations, which operation should be performed first?

$$8 - 6 \div 3 \cdot 7 + 2$$

- ☐ A. $6 \div 3$ ☐ B. $8 - 6$ ☐ C. $3 \cdot 7$ ☐ D. $7 + 2$

6. Select all of the expressions that are equivalent to 45. Shade the box(es) to select.

$43 + 20 \div 2(7 - 2)$	$44 - 20 \div 4 + 6$
$37 - (5 + 2) + 29$	$3 + 6(2 + 3)$

7. What is equivalent to $16 + (48 - 12) \div 6 - 5 \times 2$?

OA. 52

OB. 12

OC. 98

OD. 88

8. When simplifying the following, using the order of operations, which operation should be performed first?

$$6 + 4 \div 8 \cdot 9 - 4$$

OA. $9 - 4$

OB. $8 \cdot 9$

OC. $4 \div 8$

OD. $6 + 4$

9. Which is equivalent to the following?

$$5 \cdot 2 + 12 \cdot 6 \div 1$$

OA. 72

OB. 82

OC. 420

OD. 132

10. What is the value of the following expression? Write the answer in the box.

$$(45 - 13) \div 8 + 15 - 7$$