

Grade 5 - Numerical Expressions and Order of Operations - Test

Common Core 5.OA.A.1, 5.OA.A.2 · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

This test checks the order of operations for Grade 5 (5.OA.A.1 and 5.OA.A.2). It has 9 questions worth 20 points. You have 45 minutes. Show your work for every question. Calculators are not allowed. Write expressions with the correct grouping symbols.

About this test

- Grade: Grade 5
- Chapter: Numerical Expressions and Order of Operations
- Standards: 5.OA.A.1, 5.OA.A.2
- Time: 45 minutes
- Total: 20 points

Question 1 - Evaluate two expressions [2 pts]

Evaluate each expression.

- a. $14+6\times 3$ (1 point)
- b. $(14+6)\times 3$ (1 point)

Question 2 - Left to right and brackets [2 pts]

Evaluate each expression.

- a. $54\div 9\times 2$ (1 point)
- b. $5\times[4+(10-7)]$ (1 point)

Question 3 - Braces [2 pts]

Evaluate $\{20-[3\times(2+2)]\}\div 2$.

Question 4 - Write the expression [2 pts]

Write an expression for each phrase. Do not evaluate.

- a. Subtract 8 from 30, then multiply by 2. (1 point)
- b. Add 12 and 9, then divide by 7. (1 point)

Question 5 - Greater or less [2 pts]

Without calculating, tell whether $5 \times (87 + 142)$ is greater than, less than, or equal to $87 + 142$. Explain how you know.

Question 6 - Insert parentheses [2 pts]

Copy each number sentence and insert one pair of parentheses to make it true.

- a. $3 + 4 \times 5 = 35$ (1 point)
- b. $24 \div 2 + 4 = 4$ (1 point)

Question 7 - Noah at the store [3 pts]

Noah buys 4 notebooks at \$3 each and 2 pens at \$2 each.

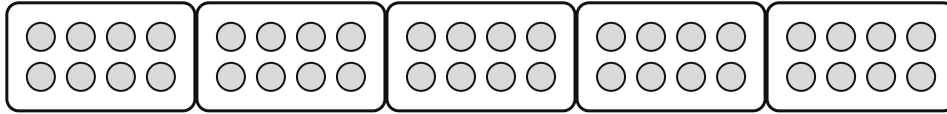


Noah's items.

- a. Write one expression for the total cost. (1 point)
- b. Find the total cost. (2 points)

Question 8 - Little League snacks [3 pts]

Aisha brings 5 boxes with 8 oranges in each box. She throws away 4 bad oranges and shares the rest equally among 9 players.



5 boxes, 8 oranges in each box.

- Write one expression for the number of oranges each player gets. (1 point)
- Find how many oranges each player gets. (2 points)

Question 9 - Mei's mistake [2 pts]

Mei evaluates $25 - 3 \times (4 + 2)$ as shown below.

$$\begin{aligned}\text{Mei: } & 25 - 3 \times (4 + 2) \\ & = 25 - 3 \times 6 \\ & = 22 \times 6 \\ & = 132\end{aligned}$$

Mei's work.

Explain Mei's mistake and find the correct value.