

Order of Operations (DMAS/BODMAS/PEMDAS)

A. Complete the following statements or equations.

1. Insert parentheses () to make the equation true: $24 \div 6 - 2 * 3 = 12$
2. In the expression $50 - 6^2 \div 4$, the operation _____ should be performed first.
3. $10 + 4 * \underline{\hspace{1cm}} = 30$
4. The "M" and "D" in PEMDAS are solved from _____ to _____.
5. $8 * (9 - \underline{\hspace{1cm}}) = 40$

B. Match the expression in Column A with its correct answer in Column B.

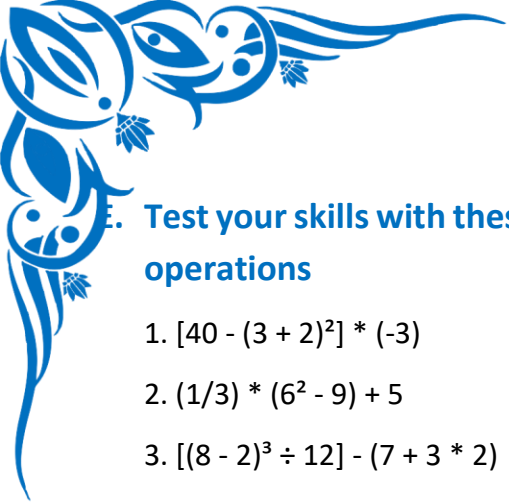
Column A	Column B
1. $(4 + 6) * 2$	A. 14
2. $4 + 6 * 2$	B. 5
3. $(20 - 5) \div 3$	C. 20
4. $20 - 5 \div 5$	D. 19
5. $(2 + 3)^2 - 11$	E. 14

C. These problems include parentheses, exponents, and negative numbers. Remember the rules!

1. $(7 + 2)^2 - 11$
2. $25 - (4 * 3) + 2$
3. $6 * (8 - 3)^2$
4. $4^3 \div 8 + (-5)$
5. $18 + [10 \div (1 + 4)]$

D. Solve the following expressions. Show your steps.

1. $12 + 3 * 4$
2. $20 - 10 \div 2$
3. $8 * 2 + 5$
4. $16 \div 4 * 3$
5. $9 + 6 - 5$



E. Test your skills with these tricky problems involving nested parentheses and more complex operations

1. $[40 - (3 + 2)^2] * (-3)$
2. $(1/3) * (6^2 - 9) + 5$
3. $[(8 - 2)^3 \div 12] - (7 + 3 * 2)$
4. $5^2 + (-80 \div 4) \div (2 - 7)$
5. $[(9 - 4)^2 + (11 - 8)^3] \div 2$

F. Write a mathematical expression for each problem and then solve it.

1. Sarah buys 5 notebooks for 3 each and a pack of pens for 3 each and a pack of pens for 4. How much did she spend in total?
2. A football team starts with 0 points. They score three touchdowns (6 points each) and two field goals (3 points each). They also get a penalty of 5 points. What is their final score?
3. Mark has 100 in his savings account. For 4 weeks, he adds his 100 in his savings account. For 4 weeks, he adds his 15 allowance. During that time, he also buys a video game for \$45. How much money is in his account?
4. The temperature at noon was 15°C. Over the next 4 hours, it dropped by 2°C each hour. What was the temperature at 4:00 PM?
5. A baker bakes 6 batches of 12 cookies. He then sells all but 10 of the cookies. How many cookies did he sell?

G. True or False

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|--|-------|
| 1. $20 - 8 + 2 = 10$ | _____ |
| 2. $4 * 3^2 = 144$ | _____ |
| 3. In PEMDAS, Addition must always be done before Subtraction. | _____ |
| 4. $3 * (4 + 5) = 3 * 4 + 5$ | _____ |
| 5. $30 \div 5 * 2 = 12$ | _____ |