



Licenciatura en Mercadotecnia Internacional

27 DE ENERO DE 2019

JERARQUÍAS EN LAS
OPERACIONES ARITMÉTICAS

Matemáticas administrativas (MI-IMAD-1901-B1-003)

JORGE FERNANDO GOMEZ PALLARES
UNADM



①

$$\begin{aligned}
 & -10 - (+2) + (-5) + (+4) - (-20) \\
 & = -10 - 2 - 5 + 4 + 20 = \\
 & \quad -17 + 24 = \\
 & \quad \quad 7
 \end{aligned}$$

②

$$\begin{aligned}
 & (+15 - (-15)) \cdot ((+15) + (-15)) = \\
 & \quad (+15 + 15) \cdot (+15 - 15) = \\
 & \quad 30 \cdot 0 = 0
 \end{aligned}$$

③ $[(-7) \times (+4)] \times (+5)$

$$\begin{aligned}
 & [-7 \times 4] \times 5 \\
 & -28 \times 5 \\
 & -140
 \end{aligned}$$

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

$$\begin{aligned}
 & 2 + 15 - 12 \\
 & \quad 5
 \end{aligned}$$

⑤ $45 \div \{-2 + 12 \div (-7 + 3) + 12 - [(-24) \div ((-3) \cdot 5 + 7)] + 5\} =$

$$45 \div \{-2 + 12 \div (-7 + 3) + 12 - [(-24) \div ((-3) \cdot 5 + 7)] + 5\} =$$

$$45 \div \{-2 + 12 \div (-7 + 3) + 12 - [(-24) \div (-15 + 7)] + 5\} =$$

$$45 \div \{-2 + 12 \div (-4) + 12 - [(-24) \div (-8)] + 5\} =$$

$$45 \div \{-2 - 3 + 12 - 3 + 5\} =$$

$$45 \div 9 =$$

5

⑥ $36 \div (-8 \div (-5 + 3) + 12 \div (-2 + 2 \cdot 4)) + 3 \cdot (-8) + 3 \cdot (-12 + 5 \cdot 2) =$

$$36 \div (-8 \div (-5 + 3) + 12 \div (-2 + 8)) + 3 \cdot (-8) + 3 \cdot (-12 + 10) =$$

$$36 \div (-8 \div (-2) + 12 \div (6)) + 3 \cdot (-8) + 3 \cdot (12 + 10) =$$

$$36 \div (4 + 2) + 3 \cdot (-8) + 3 \cdot (12 + 10) =$$

$$36 \div 6 + 3 \cdot (-8) + 3 \cdot 22 =$$

$$36 \div 6 + 24 + 66 =$$

$$6 + 24 + 66 =$$

96

$$\textcircled{7} 7 - [2 \times 9 - (4 + 13) + 4 \div 2] =$$

$$7 - [2 \times 9 - 17 + 4 \div 2] =$$

$$7 - [18 - 17 + 2] =$$

$$7 - [3] =$$

$$7 - 3 =$$

4

$$\textcircled{8} [(+3) - (+5) + (+4)] \div [(+15) \div (-3) - (-7)] =$$

$$[3 - 5 + 4] \div [15 \div (-3) + 7] =$$

$$[2] \div [-5 + 7] =$$

$$2 \div 2 =$$

1

$$\textcircled{9} 42 \div [(6) - (-3)] + 28 \div [-6 - (-8)] =$$

$$42 \div [6 + 3] + 28 \div [-6 + 8] =$$

$$42 \div 9 + 28 \div 2 =$$

$$4.66 + 14 =$$

18.66

$$\textcircled{10} 74 \div 14 - 3 \times [10 - 2(8 - 3)]$$

$$74 \div 14 - 3 \times [10 - 2(5)]$$

$$74 \div 14 - 3 \times 40$$

$$5.28 - 120$$

-114.72

$$\begin{aligned} \textcircled{11} \quad & 10 - [6 - (-5 + 4) - 2] + 1 = \\ & 10 - [6 - 1 - 2] + 1 = \\ & 10 - 3 + 1 = \\ & 8 \end{aligned}$$

$$\begin{aligned} \textcircled{12} \quad & (42 + 20) \div 4 - 2 \times (9 \div 3) - 2 \times [18 + 3 \times (13 - 9) - 5] \\ & (42 + 20) \div 4 - 2 \times 3 - 2 \times [18 + 3 \times 117 - 5] \\ & 62 \div 4 - 2 \times 3 - 2 \times [18 + 3 \times 117 - 5] \\ & 62 \div 4 - 2 \times 3 - 2 \times [18 + 351 - 5] \\ & 62 \div 4 - 2 \times 3 - 2 \times 364 \\ & 15.5 - 6 - 728 \\ & -718.5 \end{aligned}$$

$$\begin{aligned} \textcircled{13} \quad & -8 \times [5 - (-2)] - 48 \div [6 + (-14)] - 11 \times [10 + (-7)] + 36 \div [(-1) - (-10)] \\ & -8 \times [5 + 2] - 48 \div [6 - 14] - 11 \times [10 - 7] + 36 \div [-1 + 10] \\ & -8 \times 7 - 48 \div -8 - 11 \times 3 + 36 \div 9 \\ & -56 - 6 - 33 + 4 \\ & -99 \end{aligned}$$

$$\begin{aligned} \textcircled{14} \quad & +1 - [-4 + (-10) \div (-5)] + [3 + (-9) \div (-9)] = \\ & +1 - [-4 - 10 \div (-5)] + [3 - 9 \div (-9)] = \\ & +1 - [-4 + 2] + [3 + 1] \\ & +1 - [-2] + [4] \\ & +1 + 2 + 4 \\ & 7 \end{aligned}$$

$$(15) +1 - [3 - (-8) \times (+8)] + [6 + (+8) \div (+4)]$$

$$+1 - [3 + 24 \times 8] + [6 + 48 \div 4]$$

$$+1 - [3 + 192] + [6 + 12]$$

$$+1 - 195 + 18$$

$$-176$$