

# Equazioni

Risolvi le seguenti equazioni.

1.  $3x + 12x = -5 + 2$   $\left[ x = -\frac{1}{5} \right]$

2.  $x + \frac{1}{6} = -(x + 1) \cdot \frac{2}{5} + 2x$   $\left[ x = \frac{17}{18} \right]$

3.  $2x + \frac{2}{3} \cdot (-3x + 1) = \frac{4}{2}x$   $\left[ x = \frac{1}{3} \right]$

4.  $x \cdot \left( \frac{1}{4} \right) - \frac{1}{2}x + \frac{5}{4}x = 1 + (-6 + 2^2)$   $[x = -1]$

5.  $2 + (x - 3)^3 - (x^2 + 3x + 5) \cdot (x - 2) = (2 - 5x) \cdot (2x - 5) + \left( \frac{8}{3} - \frac{4}{6} \right)$   $[x = -7]$

6.  $(x - 1)^2 - \frac{5x - 2}{3} + [2(2^3 + 1)] = \frac{(3x + 2)^2}{9} + 6x + 18$   $[x = \frac{1}{9}]$

7.  $6 \cdot (x - 1) - 2(x - 3) = 42x - 21 \cdot (2x - 4)$   $[x = 21]$

8.  $(x - 3) \cdot (x + 3) + 1 - 3x = (x - 2) \cdot (x + 2) + 4x - 5$   $[x = \frac{1}{7}]$

9.  $\frac{x - 1}{8} - \frac{-5x}{6} = \frac{1}{12}$   $\left[ x = \frac{5}{23} \right]$

10.  $2 \cdot \left( \frac{x - 1}{3} + \frac{2 - x}{5} \right) = 2 \cdot \left( \frac{-2}{15} + 1 \right)$   $[x = 6]$

11.  $\frac{x + 14 - 7x}{7} - \frac{x + 3}{9} = \frac{x - 1 + 9x}{9} - \frac{x - 2}{7}$   $\left[ \frac{47}{61} \right]$

12.  $\frac{2 \cdot (x - 5)}{3} - \frac{2x + 3}{5} = \frac{1}{3}x + \frac{2 \cdot (-x - 25)}{15}$   $[x = 9]$

13.  $2x \cdot (3x^2 - 5) - 6x^2 - 5 \cdot (2x - 4)^2 = 6x^2 \cdot (x - 1) - 2 \cdot (2 - 3x)^2 - x \cdot (2x - 1) - 117$   $[x = -1]$

14.  $x^2 - 16 + (4x + 1)^2 = 17x^2 + 7(x - 10)$   $[x = -55]$

15.  $(x + 8)(x - 8) = (x - 4)^2 + 1$   $\left[ x = \frac{81}{8} \right]$