

Pre-Calculus Homework #1

- 1) Simplify: $\frac{-m^3 - x^0}{-2d - c^2}$ if $m = -3$, $x = -6$, $d = -4$, and $c = -1$
- 2) Solve: $-2(4x - 9) - 1^7 - (-1 - 1)^4 - 6x = -3x - (6x - 5) + (-1 - 2)^3 - 4^3$
- 3) Solve: $-4^2 - 12 \div 2(-5 - 1) - 2(4x - 3) > -3(4x - 3) - (-7 - 2)^0 - x$
- 4) Solve: $\frac{5}{72} - \frac{7}{48}x = \frac{1}{54} + \frac{13}{18}x$
- 5) Solve: $\frac{3x - 5}{12} + 1 \leq \frac{3}{8}x - \frac{2x - 1}{9}$
- 6) Solve: $-6|2x - 5| + 22 = 4$
- 7) Solve: $5|3x + 4| - 7 > 3$
- 8) Simplify: $\frac{-k^4 - y^3}{7m^0 - 3x^2}$ if $k = -3$, $y = -4$, $m = -8$, and $x = -5$
- 9) Solve: $-5(2x - 1) - 28 \div 7(-1 - 3) - 5^0 - 4x - 2^4 = -2x - 6(2x + 5) - (-1 - 2)^3$
- 10) Solve: $-7(3x - 2) - 24 \div 8(-2 - 1) - 3^2 > -(-1 - 7)^0 - 5x - 6(4x - 3)$
- 11) Solve: $\frac{8}{27} - \frac{1}{18}x = \frac{5}{12} - \frac{3}{8}x$
- 12) Solve: $\frac{-3x - 2}{4} - \frac{5}{3} > -\frac{7x + 4}{8} - 6$
- 13) Solve: $-|5x + 3| - 11 = 5$
- 14) Solve: $-3|x - 2| + 28 \geq 10$
- 15) Simplify: $\frac{-2x^0 - y^4}{-4a^3 + 5m}$ if $m = -4$, $a = -3$, $x = -7$, and $y = -2$
- 16) Solve: $-6(3x - 2) - (-2 - 1)^3 - 7x + 7 = -3^0 - 25x - 4^2 - (-1 - 3)^3 - (4x - 9)^0$
- 17) Solve: $\frac{4x + 5}{28} - \frac{4x - 27}{35} \geq \frac{1}{49}x + 1$
- 18) Solve: $4|5x - 2| - 9 = 7$
- 19) Solve: $-7|6x - 1| - 13 \leq 8$
- 20) Solve: $-(9x - 4) - 5x - 2^0 - 4^2 - 15 \div 3(-2 - 3) = -6(3x - 2) - 8x - (-2 - 3)^2$