

## Algebra I Homework #4

- 1) Simplify:  $-|-1-3|-2|-5+2|-|6|$
- 2) Turn  $1\frac{3}{4}$  % into a fraction.
- 3) Simplify:  $\frac{-20 \div 5(-1-1)^2 - (-3+1) - 2^3}{-7^0 - (-2-1)^2 - 4 - (-1-1)^3}$
- 4) Simplify:  $\frac{-4a - c^3}{-y^2 - x}$  if  $a = -2$ ,  $c = -1$ ,  $x = -6$ , and  $y = -3$
- 5) Simplify:  $\frac{5}{24} + \frac{7}{54} \div \frac{40}{72} - \frac{1}{18}$
- 6) Translate and simplify: Five less than the sum of a number and seven
- 7) Solve:  $-3(2x-5) - 4x - (-3-1)^2 = -6^0 - 4(3x-1) - 7 - 5x$
- 8) 36 is what percent of 20?
- 9) Translate and simplify: The product of six and eight more than the quotient of a number and three
- 10) 24 percent of what number is 42?
- 11) Solve:  $81 - 48x = 153$
- 12) Translate and simplify: A number decreased by the difference between the number and twelve
- 13) Solve:  $-18 \div 6(-1-2) - 2(3x-4) - 5x - 4^2 = 5(3x-7) - (-1-1)^3$
- 14) 72 is 18 percent of what number?
- 15) Translate and simplify: Nine more than the product of six and five less than a number
- 16) 54 is what percent of 72?
- 17) Solve:  $-3(2x-5) - (-4x-3) = -2(3x-8)^0 - 5(6x-3) - 3^2$
- 18) Translate and simplify: Seven less than the difference between six times a number and eight
- 19) 16 percent of what number is 80?
- 20) Solve:  $-(-3x+1) - (-1-2)^2 - 2x = 4(5x-7) - 6 \div 3(-1-1) - 1^8$

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