Algebra I Homework #4

1) Simplify: $-\left|-1-3\right|-2\left|-5+2\right|-\left|6\right|$

2) Turn $1\frac{3}{4}$ % into a fraction.

3) Simplify: $\dfrac{-20 \div 5(-1-1)^2 - (-3+1) - 2^3}{-7^0 - (-2-1)^2 - 4 - (-1-1)^3}$

4) Simplify: $\dfrac{-4a - c^3}{-y^2 - x}$ if a = -2, c = -1, x = -6, and y = -3

5) Simplify: $\dfrac{5}{24} + \dfrac{7}{54} \div \dfrac{40}{72} - \dfrac{1}{18}$

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: $-(-3x+1) - (-1-2)^2 - 2x = 4(5x-7) - 6 \div 3(-1-1) - 1^8$