

## Algebra I Homework #5

- 1) Simplify:  $-9^0 - (-1 - 2)^2 - 12 \div 6(-1 - 1) - 3^2$
- 2) 12 is what percent of 8?
- 3) Simplify:  $\frac{-m - 2c^2}{-x^3 - a}$  if  $a = -5$ ,  $c = -2$ ,  $x = -2$ , and  $m = -4$
- 4) Simplify:  $\frac{7}{18} \div \left(\frac{72}{64} \div \frac{108}{48}\right) - \frac{5}{24}$
- 5) Simplify:  $\frac{-4^2 - (-1 - 1)^3 - 18 \div 9(1 - 3) - 8^0}{-(-3 - 1)^0 - (-1 - 2)^3 - 1^7 - (-1 - 1)^2}$
- 6) Solve:  $\frac{5}{8}x - \frac{1}{12} = \frac{1}{6}x + \frac{7}{9}$
- 7) Solve:  $-2^4 - (8x - 1) - 3x - (-2 - 1)^3 = -3^2 - 3(4x - 1) - 9^0 + x$
- 8) Solve:  $\frac{1}{16}x + \frac{5}{6} = \frac{7}{24}x - \frac{11}{18}$
- 9) Solve:  $-4(3x - 2) - (-1 - 1)^3 - 5x = -2^4 - 5(2x - 1) - (-1 - 5) - 6x^0$
- 10) Solve:  $\frac{9}{14}x - \frac{4}{21} = \frac{5}{9}x - \frac{1}{28}$
- 11) Solve:  $-1^8 - (7x - 7) + (-1 - 1)^3 - 6x = -6^2 - 3(4x - 3) + (-2 - 3)^2 - x$
- 12) Solve:  $\frac{5}{18} - \frac{7}{12}x = \frac{7}{8} - \frac{1}{9}x$
- 13) Solve:  $-6^0 - 10 \div 5(-1 - 1) - (7x - 2) - 3x - 3^2 = -2(4x - 7) - (-2 - 1)^2 - 2x$
- 14) Solve:  $\frac{1}{48} + \frac{5}{36}x = \frac{7}{8} - \frac{11}{24}x$
- 15) Solve:  $-(-1 - 1)^4 - (3x - 1)^0 - 8x - (-1 - 2)^2 = -9^0 - 4(4x - 1) - 3x - 3^4$
- 16) Solve:  $\frac{9}{16}x - \frac{1}{24} = \frac{7}{12}x + \frac{5}{8}$
- 17) Solve:  $-5(x - 3) - (-7x - 4) - (-4 + 1)^2 = -2(3x - 8) - (6x - 3) - 3^2$
- 18) Solve:  $\frac{5}{18}x - \frac{3}{8} = \frac{1}{24}x - \frac{7}{9}$
- 19) Solve:  $-2(-4x - 1) - (-1 - 2)^3 + 7x = 3(5x + 7) - 9 \div 3(-5 + 2) - 2^0$
- 20) Solve:  $\frac{7}{10}x + \frac{2}{15} = \frac{1}{6}x - \frac{9}{20}$

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