

Math 90 Study Guide

- 1) Add, Subtract, Multiply and Divide fractions and mixed numbers:
-Reduce to lowest common dominator and then calculate
 - a. $(2/4) + (1/3) =$
 - b. $(7/8) - (3/16) =$
 - c. $(5/6) * (3/4) =$
 - d. $(12/20) / (2/4) =$
- 2) Find 33.5% of 3000.
- 3) Evaluate: $(4)(2/5) - (4/2)(-1/3) =$
- 4) Evaluate: $6^2 - 20 + 4 * 8^2$
- 5) Evaluate $(x+5y)(2z)$ for $x=-z$, $y = 6$, $z = -2$
- 6) Convert decimal: .753 to %
- 7) If $1/3$ of a number is -8 , what is $1/4$ of that number:
- 8) Evaluate expression: $-2[36 - (6-8)] =$
- 9) Absolute Value $| 6 - 20 |$
- 10) Judy runs 4.5 miles/hr. This is 75 % of Mary's speed. How many miles/hr does Mary run?
- 11) If $1/3$ of a number is -8 , what is $1/2$ of the number?
- 12) $f(x) = 4x^4 - x^2 + 9$. Find $f(-4)$.
- 13) Evaluate: $(3)(2/6) - (5/3)(-1/3) =$

Math 90

14) Find solution of equation:

$$6(y-5) = 12y + 36$$

15) Find solution of inequity: $-7u + 2 > 5u - 1$

16) Solve equation $T = (6x + y)/4$ for y .

17) Simplify: $(9x^3 + 2x^2 - 2x + 11) - (6x^3 - 7x + 7)$

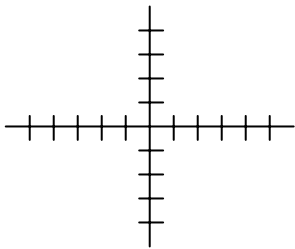
18) Multiply and simplify: $(7x - 3)(2x + 4) =$

19) The solution set of the equation is:

- Use quadratic formula to solve.

$$5x^2 + 11x + 5 = 0$$

20) The graph of $3x - y + 12 = 0$ crosses the x-axis at $x =$



Math 90 Study Guide Answers

- 1) a. $\frac{5}{6}$ or .833
b. $\frac{11}{16}$ or .6875
c. $\frac{5}{8}$ or .625
d. $\frac{6}{5}$ or 1.2
- 2) 1005
- 3) 2.267 or $\frac{34}{15}$
- 4) 272
- 5) -128
- 6) 75.3%
- 7) -6
- 8) -76
- 9) 14
- 10) 6 miles/hr
- 11) -12
- 12) 1017
- 13) 1.556 or $\frac{14}{9}$ or $1\frac{5}{9}$
- 14) $y = -11$
- 15) $.25 > u$ or $u < .25$
- 16) $4T - 6x = y$
- 17) $3x^3 + 2x^2 + 5x + 4$
- 18) $14x^2 + 22x - 12$
- 19) -.642 or -1.558
- 20) $x = -4$