Math 042: Exam I	**Date: Feb 24, 2010**
Name: ______________________	**Section:** ____________

1. Simplify: $7a^3 - 2a^2 - (5a^2 - 6)$

Your answer: _____________________________ .

2. Solve for x: $5x - 9 = 2x - 16$

Your answer: _____________________________ .

3. Solve for x: $\frac{2}{3}x - 1 = \frac{3}{4}x$

Your answer: __________________________________ .

4. Simplify: $\frac{(5a/7b^2)}{(15/8ab)}$

Your answer: __________________________________ .

5. Evaluate: $-a^2 + 3b^3$ for $a = 6$, $b = -3$

(a) 45 (b) -45 (c) 117 (d) -117

6. Simplify: $\frac{(3ab)^2}{9a^2b^3}$

Your answer: ____________________________ .

7. Solve the inequality: $-2(y+4) > 18$

Your answer: ____________________________ .

8. Solve for c: $f = \frac{9}{5}c + 32$

(a) $\frac{5(f-32)}{9}$ (a) $\frac{5f-32}{9}$ (c) $\frac{9}{5}f - 32$ (d) $\frac{5f}{9} - 32$

9. Solve for x: $cx + b = ax - d$

Your answer: ______________________ .

10. 160% of what number is 80?

Your answer: ______________________ .

11. 72 is what percent of 90?

Your answer: ______________________ .

12. 6 times the sum of a number and its cube can be represented by

(a) $6(n + n^3)$ (b) $6(n + n)^3$ (c) $6 + n + n^3$ (d) $6n + n^2$

13. The length of a rectangle is 5 less than twice its width. What can be used to represent its perimeter?

Your answer: ______________________________ .

14. An RCA employee earned \$240 a week. If \$32 is deducted for taxes, \$25 for health benefits and \$15 for pension, what percent of the salary is left?

(a) 30% (b) 70% (c) 72% (d) 168%

15. If \$1100 is invested at $t\%$ and \$700 is invested at $(t-2)\%$ what can be used to represent the interest drawn in one year?

Your answer: ______________________________ .