

Math 102 Quiz 1

January 6, 2012

name_____

Instructions: Show all your work, and check all your solutions.

If your solution doesn't check, try to find out why, or write "doesn't check" if you run out of time.

1. (68pts) Solve each equation. Check your solutions.

(a) $2a + 15 = 5$

(b) $-2a - 1 + 3 - 2a = 7$

(c) $\frac{1}{a} + 3 = 5$

(d) $\frac{2}{3}a + 10 = -\frac{1}{3}a - 6$

2. (32pts) Solve each equation **for** x . Check your solutions.

(a) $3x + y = x + 2y$

(b) $\frac{1}{2}x + 3 = x + y$

Extra credit. (10pts) If you converted \$5 into euros, you would have three euros, with ninety U.S. cents left over.

How much is one euro worth, in dollars? Round to the nearest cent.

(Hint: this is a linear equation in disguise.)