Algebra 1
Chapter 2 Practice Test

1.) (5 pts each) Solving One Step Equations (2-1) Solve each equation.

a) $b + 8 = 21$

b) $a - 11 = 54$

c) $6a = 72$

d) $\frac{y}{8} = 5$

e) $-15t = 45$

2.) (5 pts each) Solving Two-Step Equations (2-2) Solve each equation.

a) $3x + 8 = 44$

b) $\frac{b}{5} - 4 = -2$

c) $15 = 6x - 9$

d) $8 = \frac{a}{-7} + 12$

3.) (5 pts each) Solving Multi-Step Equations (2-3) Solve each equation.

a) $8c + 7(2c - 3) = 23$

b) $3(4 + x) - (2x + 3) = 14$

c) $9y - 2(3y - 5) = 8$

d) $\frac{c+5}{2} = 11$

4.) (5 pts each) Equations with Variables on Both Sides (2-4) Solve each equation.

a) $6x - 25 = 7 - 2x$

b) $4(a - 2) = 7a - 35$

c) $9b + 15 = 11b + 27$

d) $8(3y - 2) = 4(5y + 4)$

5.) (5 pts each) Equations and Problem Solving (2-5) Write and solve an equation for each situation.

a) A man stole Nate's burrito and drove away at 50 mi/hr. Hangry, Nate took off on foot in the same direction a half an hour later. If Nate ran at 60 mi/hr, how long will it take for him to catch the nefarious burrito burglar?

b) A train leaves the station at 12pm traveling at 120 mi/hr. A second train left from the same station at 2pm traveling 80 mi/hr in the opposite direction. How long until the trains are 840 miles apart?

c) Usain Bolt ran an iron man event at a respectable 12 mi/hr. Nate, feeling generous, gave him an hour head start. If Nate ran 18 mi/hr, how long until he caught up with Usain Bolt?