Sec. 1.1 and 1.2

1. The sum of all solutions of the equation

$$\frac{|x-1|+2}{1+|x-1|}-\frac{2}{3}=0.$$

2. The cost of producing x-calculators in dollars is given by $C = 1500 - \frac{3}{2}x$. The number of calculators that can be produced at cost of \$1200 equals to ...

3. The solution set of $|x| + 3x - 9 = 0$ consists of

   (a) Two positive rational numbers.
   (b) Only one positive rational number.
   (c) One positive and one negative rational numbers.
   (d) Two negative rational numbers.
   (e) Only one negative rational number.

4. If the equation $18x - 12 = 3(ax + b) - 6x$ is an identity, then $a + b = \ldots$

5. If $t = \frac{3}{2}x(5y - 7z)$ then $z = \ldots$

6. The sum of all solutions of the equation

$$3|2x+1|+4=28$$

   is equal to ...

7. The equation $\frac{20x-9}{4} = \frac{15x+11}{3}$ is

   (a) Contradiction
   (b) Conditional
   (c) An identity
   (d) Equivalent to the equation $60x - 27 = 0$.
   (e) Equivalent to the equation $60x + 44 = 0$.