QUIZ 1 - MTH 166 - 10 points

Name:_________________________________________Date:__

Instructions: Solve the following. Remember to show all work in order to receive full credit.

1. Use inequality and interval notation to describe the set.
   a) x is negative
   b) y is at least 5
   c) z is at least 3 but no more than 7

2. Use a calculator to evaluate the expression.
   a) \[\frac{12.7 - 4.1}{7 - 3}\]
   b) \[\frac{1/5 (-8 - 9)}{(-1/3)}\]
   c) \[\sqrt{7.6}\]

3. Completely factor the expression
   a) \(x^3 - 16x\)
   b) \(2t^3 - 54\)
   c) \(13x + 6 + 5x^2\)

4. Given points (1,12), and (6,0)
   a) Find the midpoint of the line segment joining the points.
   b) Find the distance between the points.

5. Find the standard form of the equation of the specified circle.
   center: (3,-2); radius: 7

6. Find the center and radius of the circle \((x - 2)^2 + (y + 1)^2 = 2\)

- REMEMBER after QUIZ # 2 there will be an exam in the TESTING CENTER
- EXAM # 1 will include concepts from Quizzes # 1 and # 2