A quiz on Preliminary Material will be held the first Friday of class, and will cover Part 3 of the Student Handbook. You should memorize all the formulas that the handbook says to memorize. Calculators will not be allowed. For extra review of trigonometry see Appendix D of the textbook. A review of algebra is available on the textbook web site: www.stewartcalculus.com. Below are some Sample Questions:

1. \( \sin \pi/6 = ? \)
   (a) 0  (b) 30°  (c) \( \sqrt{3}/2 \)  (d) 1/2  (e) \( \sqrt{2}/2 \)

2. Which of the following equals \( \frac{e}{(e^1 - e^2)^2} \)?
   (a) \( e^3 - e^5 \)  (b) \( e^{-1} - e^{-2} \)  (c) \( e^3 - 2e^4 + e^5 \)  (d) \( e^{-2} - 2 + e^{-3} \)  (e) \( e^{-1} - 2e^{-2} + e^{-3} \)

3. What is the volume of a sphere in terms of its radius, \( r \)?

4. Solve \( y = \frac{x + 2}{x + 3} \) for \( x \) in terms of \( y \).
   (a) \( x = \frac{-3y + 2}{y - 1} \)  (b) \( x = -2 \)  (c) \( x = 1 + \frac{2}{3} \)  (d) \( x = \frac{y + 2}{y + 3} \)  (e) \( x = \frac{y - 2}{y - 3} \)

5. Find the slope-intercept equation of the line that passes through the point \((3, 5)\) and is parallel to the line \( y = 2x + 7 \).
   (a) \( y = 3x + 5 \)  (b) \( y = 2x - 1 \)  (c) \( y = 2x + 5 \)  (d) \( y = 2x + 2 \)  (e) \( y = 3x + 7 \)

6. Use the technique of completing the square to rewrite \( y = x^2 + 6x + 11 \) in the form \( y = (x + h)^2 + k \), if possible. (No partial credit.)

7. Which function corresponds to the graph (1) below?
   (a) \( y = (x-2)^2 + 1 \)  (b) \( y = (x+2)^2 + 1 \)  (c) \( y = (x+1)^2 + 4 \)  (d) \( y = (x-1)^2 = 4 \)  (e) \( y = x^2 + 5 \)

8. Which function corresponds to the graph (2) below?
   (a) \( y = \sin(3x+4) \)  (b) \( y = \sin(3x) + 4 \)  (c) \( y = 4 \sin(x+\pi) \)  (d) \( y = 3 \sin(x) \)  (e) \( y = \sin(x) + 3 \)