

Date:

**Calculus I**

Name:

Section:

**PreCalculus Gateway Quiz** (version #183)

ID:

Calculators are **not** allowed. At least 9 must be correct for any credit. Allowed time: 10 mins.

1. Solve for  $x$  where:  $6x = x + 30$  .
2. Divide and simplify:  $\frac{2}{3} \div \frac{4}{5}$  .
3. Factor :  $x^2 + 5x + 6$  .
4. Add:  $\frac{1}{3} + \frac{2}{7}$  .
5. Convert from radians to degrees:  $-\pi/3$  .
6. Write the equation, in slope intercept form, for the line through points  $(2, 1)$  and  $(4, 7)$ .
7. Find exactly:  $\cos(30^\circ)$  .
8. Find the distance between the points given by  $(-3, 4)$  and  $(1, 3)$ .
9. Simplify :  $a^7b^6b^{-2}/a^4$  .
10. Sketch the graph of the function given by  $f(x) = -x^2 + 1$  . Include axes with tick marks.