

Quiz 3

BCC Spring 2008 math 099

NAME _____

Show **all your work**.

1. Solve for x :

(a) $\frac{(x+2)^2+7}{4} = 22$

(b) $\frac{3x^2+15}{3} - 20 = 0$

2. For each of the following equations determine
- (a) If the parabola opens upward or downward
 - (b) The number of x -intercepts
- Justify your answers algebraically.**

i. $y = x^2 - 7x + 5$

up or down?: _____

of x -intercepts: _____

ii. $y = x^2 - 3x + \frac{9}{4}$

up or down?: _____

of x -intercepts: _____

iii. $y = 4x^2 - 2x$

up or down?: _____

of x -intercepts: _____
