

December 4, 2015

* Tinaj Exam - Friday

- 3 Exams
- 7 quizzes

December 11th
10:20a - 12:20p

Dec 4-10:06 AM

$f(x) = 3x^2 - 4x + 2$ • General
• Standard

① Convert to Vertex Form

* Discriminate $b^2 - 4ac$
 $(-4)^2 - 4(3)(2)$
 $16 - 24$
 $-8 < 0$
* 2 Complex roots

$3x^2 - 4x = -2$

$x^2 - \frac{4}{3}x = -\frac{2}{3}$

① $(-\frac{4}{3}) \cdot \frac{1}{2} = -\frac{2}{3}$
 ② $(-\frac{2}{3})^2 = \frac{4}{9}$ add to both sides

$x^2 - \frac{4}{3}x + \frac{4}{9} = -\frac{2}{3} + \frac{4}{9} = -\frac{6+4}{9}$

$(x - \frac{2}{3})^2 = -\frac{2}{9}$

$f(x) = 3 \left[(x - \frac{2}{3})^2 + \frac{2}{9} \right]$

$= 3(x - \frac{2}{3})^2 + \frac{2}{3}$
h = 2/3 k = 2/3

Dec 4-10:31 AM

Vertex: $(\frac{2}{3}, \frac{2}{3})$

A.S.: $x = \frac{2}{3}$ a line!

Opens: up

of Type: 2 Complex

Y-int.: $(0, 2)$

X-int.:

Dec 4-10:46 AM