

Math 121**Quiz 3**

Justify all answers with neat and organized work. Clearly indicate your answers.
10 points possible.

1. Completely factor each expression.

(a) (2 pts.) $x^3 - x^2 + 2x - 2$

(b) (2 pts.) $8x^2 - 10x - 3$

(c) (2 pts.) $3(x + 2)^2(x + 5)^4 + 4(x + 2)^3(x + 5)^3$

2. Perform the operation and simplify.

(a) (2 pts.) $\frac{x^2 - x - 6}{x^2 + 6x + 9} \cdot \frac{x + 3}{x^2 - 4}$

(b) (2 pts.) $5 - \frac{4}{x + 3}$