

## 4 Quiz 4 MAT 1275 Professor Chiu

Name: \_\_\_\_\_

- This quiz consists of **2** questions, each worth points, for a total of **10** points.
- You have **10** minutes to complete the quiz.
- Show all work and justify your answers.
- Scientific calculators are allowed.
- Wishing you success.

1. Simplify and check at an appropriate value:

$$\begin{aligned} & (-2x^2 + 3x - 4) - (5x^2 - 8x + 2) \\ = & -2x^2 + 3x - 4 - 5x^2 + 8x - 2 \\ = & -2x^2 - 5x^2 + 3x + 8x - 4 - 2 \\ = & \boxed{-7x^2 + 11x - 6} \end{aligned}$$

2. Multiply:

$$\begin{array}{r} 2x - 5 \\ 3x \phantom{+ 4} \\ + \\ 4 \phantom{+ 0} \\ \hline 6x^2 - 15x \\ 8x - 20 \\ \hline 6x^2 - 7x - 20 \end{array}$$
$$\begin{aligned} & (2x - 5)(3x + 4) \\ = & 6x^2 - 15x + 8x - 20 \\ = & 6x^2 - 7x - 20 \end{aligned}$$