

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

Signature: \_\_\_\_\_

Show all work clearly and in order, and box your final answers. Justify your answers whenever possible. You have 20 minutes to take this 10 point quiz.

**Do only one of the following two problems.**

1. 10 points Evaluate.<sup>1</sup> You must show work!

$$\int_1^4 \sin \sqrt{x} \, dx$$

2. 10 points Integrate. You must show work!

$$\int_{-1}^1 \frac{2x^3 - 4x^2 - 15x + 5}{x^2 - 2x - 8} \, dx.$$

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<sup>1</sup>First make a simple  $u$ -substitution where  $u = \sqrt{x}$ , then use integration by parts.