

Algebra II Practice Quiz 5.7**Short Answer**

1. (5 points) Graph $y \geq -5x^2 + 2x - 3$.

2. (5 points) Solve the inequality $x^2 - 14x + 40 \leq -8$ by using algebra.

3. (5 points) The daily profit P that a bakery makes can be modeled by the function $P(x) = -15x^2 + 330x - 815$. (Note that profit does not increase linearly with price because a higher price usually means fewer total pizzas sold.) What must be the price of each loaf of bread to provide a daily profit of at least \$600? (Round your answer to the nearest dollar.)

4. (1 point) Solve the inequality $x^2 + x - 6 \geq -4$ by using a table and a graph.

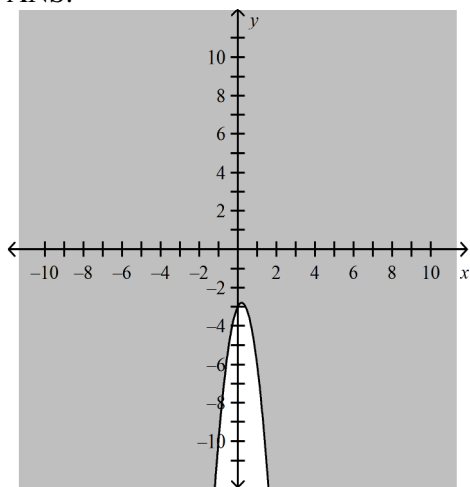
5. (1 point) Solve the inequality $-8x^2 - 14x + 4 > -11$.

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Answer Section

SHORT ANSWER

1. ANS:



PTS: 5

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2. ANS:

$$6 \leq x \leq 8$$

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3. ANS:

$$6 \leq x \leq 16$$

PTS: 5

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4. ANS:

$$x \leq -2 \text{ or } x \geq 1$$

PTS: 1

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5. ANS:

$$-2.5 < x < 0.75$$

PTS: 1