

Name: _____ Class: _____ Date: _____

ID: A

Algebra II Practice Quiz 5.4

Short Answer

1. (1 point) Solve the equation $x^2 - 8x + 16 = 18$.

2. (5 points) Complete the square for the expression $x^2 - 16x + \underline{\hspace{1cm}}$. Write the resulting expression as a binomial squared.

3. (5 points) Solve the equation $x^2 = 45 - 4x$ by completing the square.

4. (5 points) Write the function $f(x) = -8x^2 + 48x - 74$ in vertex form, and identify its vertex.

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Answer Section

SHORT ANSWER

1. ANS:

$$x = 4 \pm 3\sqrt{2}$$

PTS: 1

REF: Page 341

2. ANS:

$$(x - 8)^2$$

PTS: 5

REF: Page 342

3. ANS:

$$x = 5 \text{ or } x = -9$$

PTS: 5

REF: Page 343

4. ANS:

$$f(x) = -8(x - 3)^2 - 2;$$

vertex: (3, -2)

PTS: 5

REF: Page 344