

There were three different versions of this test. You can tell which version of the exam you had by looking at the first question. Pay careful attention to both the question and the answers.

Version A

1. How many solutions does each equation have?

(I) $x^3 + 5 = 0$

(II) $x^4 = -4$

Possibilities:

- (a) Equation (I) has 3 solutions, and equation (II) has no solutions.
 - (b) Equation (I) has 3 solutions, and equation (II) has 1 solution.
 - (c) Equation (I) has 1 solution, and equation (II) has 2 solutions.
 - (d) Equation (I) has no solutions, and equation (II) has 2 solutions.
 - (e) Equation (I) has 1 solution, and equation (II) has no solutions.
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Version B

1. How many solutions does each equation have?

(I) $x^4 - 3 = 0$

(II) $x^3 = 3$

Possibilities:

- (a) Equation (I) has no solutions, and equation (II) has 1 solution.
- (b) Equation (I) has 2 solutions, and equation (II) has 1 solution.
- (c) Equation (I) has 1 solution, and equation (II) has 3 solutions.
- (d) Equation (I) has 2 solutions, and equation (II) has 3 solutions.
- (e) Equation (I) has no solutions, and equation (II) has no solutions.

Version C

1. How many solutions does each equation have?

$$\text{(I)} \quad x^4 + 4 = 0$$

$$\text{(II)} \quad x^3 = -5$$

Possibilities:

- (a) Equation **(I)** has no solutions, and equation **(II)** has 1 solution.
- (b) Equation **(I)** has 1 solution, and equation **(II)** has 3 solutions.
- (c) Equation **(I)** has 2 solutions, and equation **(II)** has 1 solution.
- (d) Equation **(I)** has no solutions, and equation **(II)** has 3 solutions.
- (e) Equation **(I)** has 2 solutions, and equation **(II)** has no solutions.

Please go to the web page and select the link for your version of the exam.