

Lesson 11 Practice Problems

1. Which point represents the complex number -3 + 2i?

					,	Ì						
					-4 <i>i</i> -							
					-3 <i>i</i> -							
		A			-2i -				В			
-6	-	4	_	2			ź	2	2	1	6	5
-6	_	-4		2	_j -		2	2		1	(5
-6		-4 D	-	2	-i - -2i -		2	2	C	1	6	5
-6		4 D		-2	-i - -2i - -3i -		2	2	C	1	(5
-6	-	4 D		2				2	C	1		

A. A

В. В

- C. C
- D. D

2. Match each expression to an equivalent expression.

A. 2 <i>i</i> • 8	116
B. 16 <i>i</i> ³	2. 16
C. $(2i)^4$	3. - 16 <i>i</i>

D. 2*i* • 8*i* 4. 16*i*



- a. Diego squared a number and got 4. Andre squared a different number and got4. What were the numbers that Diego and Andre squared?
 - b. Jada squared a number and got -4. Elena squared a different number and got -4. What were the numbers that Jada and Elena squared?
- 4. Find **all** solutions to each equation.

a. $a^2 = 1$ b. $b^2 = 13$ c. $c^2 = -9$

d. $d^2 = -5$



5. Find the exact solution(s) to each of these equations, or explain why there is no solution.

a.
$$\sqrt[3]{a+2} = 4$$

b.
$$\sqrt[3]{b} + 5 = 4$$

c.
$$\sqrt[3]{c-1} - 14 = -4$$

(From Unit 3, Lesson 8.)

6. Explain how you know that $\sqrt{-1}$ is not a negative number.

(From Unit 3, Lesson 10.)