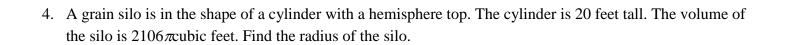
Algebra 2 Honors		Name	
	otes: 3-5, 3-6 Applications		Block
1.	The design of a box specifies that its length is 4 inches greater the width. The volume of the box is 12 cubic inches. What is t		ght is 1 inch less than
2			1 . 1 . 1 1 1 1 1
2.	A shipping crate must hold 15 cubic feet. The length should be should be 2 feet less than the height. What should the height of	of the crate be?	neight, and the width
3.	A silo is in the shape of a cylinder with a cone-shaped top. Th	•	<u>-</u>
	cone is 1.5 times the radius. The volume of the silo is 828 \pi cul	bic feet. Find the radius	of the silo.



In 5-8, write the simplest polynomial function with the given zero(s).

5. 
$$2 + i$$

6. 
$$2 + i$$
 and 1

7. 
$$2 + i, \sqrt{3}$$
, and 1

8. 
$$2i$$
,  $1+\sqrt{2}$ , and  $\sqrt{3}$