Lesson 4.6 Worksheet

Name: _____

Solve the equation.

1.) $x^2 = -28$

2.) $r^2 = -624$

3.) $z^2 + 8 = 4$

4.) $2x^2 + 31 = 9$

5.) $9 - 4y^2 = 57$

6.) $-5(n-3)^2 = 10$

Write the expression as a complex number in standard form.

7.) $(6 - 3i) + (5 + 4i)$

8.) $(-2 - 6i) - (4 - 6i)$

9.) $(10 - 2i) + (-11 - 7i)$

10.) $(8 - 5i) - (-11 + 4i)$

11.) $6i(3 + 2i)$

12.) $-i(4 - 8i)$

13.) $(5 - 7i)(-4 - 3i)$

14.) $(-2 + 5i)(-1 + 4i)$

15.) $(8 - 3i)(8 + 3i)$

16.) $\frac{6i}{3-i}$ 17.) $\frac{4+9i}{12i}$ 18.) $\frac{7+4i}{2-3i}$

Find the absolute value of the complex number.

19.) $-3+10i$ 20.) $-8i$ 21.) $7+7i$

Use the properties of exponents to write the complex number in standard form.

22.) $8-i^2$ 23.) $2+i^5$ 24.) $-3+i^8$ 25.) $5-i^{13}$

26.) $y=-3x^2+12x-6$

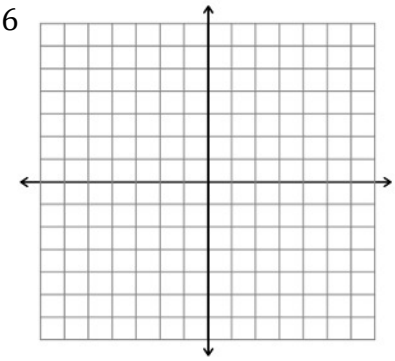
AOS: _____

vertex: _____

y-int: _____

opens: _____

max./min. value: _____



x					
y					

work:

27.) $y=x^2-2x$

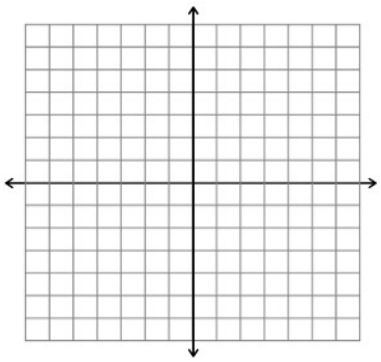
AOS: _____

vertex: _____

y-int: _____

opens: _____

max./min. value: _____



x					
y					

work: