

p.227 1-27, skip divisible by 4

2. $5 - 7i$

6. $\sqrt{5} - 2$

10. $5 + 5i$

14. $15 + 18i$

18. $5i$

22. $x = 3, \quad y = -7$

26. $-2 - 2i$

The Complex Conjugate

of the complex number $z = a + bi$ is

$$\bar{z} =$$

1. Find the product of the complex number and its conjugate.

$$-1 - \sqrt{2}i$$

2. Write the expression in standard form.

$$\frac{(1 - \sqrt{2}i)(1 + i)}{(1 + \sqrt{2}i)}$$

3. Solve the equation.

$$x^2 + x + 11 = 5x - 8$$

Absolute Value of a Complex Number

The absolute value or modulus, of the $z = a + bi$ is

$$|z| = |a + bi| =$$

Distance

Between the points u and v in the complex plane is

$$d = | \quad |$$

Midpoint

Of the line segment connecting the points u and v is

$$\frac{(\quad)}{2}$$

4. Plot the given points. Draw the line segment connecting them, find its length, and midpoint.

$$-5 + i, \quad 3 + 4i$$

