1. Give the absolute value. 5+8i

7. Give the absolute value. -6-4i

2. Give the absolute value. -2+6i

8. Give the absolute value. 3+5i

3. Give the absolute value. -9+2i

9. Compare the quantity in Column A with the quantity in Column B.

$$\begin{array}{c|c}
\underline{\text{Column A}} & \underline{\text{Column B}} \\
|3-2i| & |5-i|
\end{array}$$

- [A] The quantity in Column A is greater.
- [B] The quantity in Column B is greater.
- [C] The two quantities are equal.
- [D] The relationship cannot be determined on the basis of the information supplied.

5. Give the absolute value. -4-9i

4. Give the absolute value. 1+3i

10. Write a complex number, a + bi,  $(a \ne 0, b \ne 0)$  such that |a + bi| = 17.

6. Give the absolute value. 8-i

Precalculus Practice N.CN.A.3: Moduli of Complex Numbers www.jmap.org

[1]  $\sqrt{89}$ 

[2]  $2\sqrt{10}$ 

[3]  $\sqrt{85}$ 

[4]  $\sqrt{10}$ 

[5]  $\sqrt{97}$ 

[6]  $\sqrt{65}$ 

[7]  $2\sqrt{13}$ 

[8]  $\sqrt{34}$ 

[9] <u>B</u>

Answers may vary. Sample: 8+15i, or

[10] -8+15i, or 8-15i, or -8-15i