

3, 13, 14, 8, 6

$$3. \quad -4\sqrt{-36}$$

$$-4 \cdot 6i$$

$$\textcircled{-24i}$$

$$6. \quad \sqrt{-75} = \textcircled{5i\sqrt{3}}$$

$$25 \begin{array}{l} \nearrow \\ \boxed{3} \end{array}$$

$$\textcircled{55}$$

$$8. \quad 5\sqrt{-27}$$

$$\begin{array}{l} \boxed{3} \nearrow 9 \\ \textcircled{55} \end{array}$$

$$5 \cdot 3i\sqrt{3}$$

$$\textcircled{15i\sqrt{3}}$$

$$13. \quad \sqrt{-5} \cdot \sqrt{-10}$$

$$i\sqrt{5} \cdot i\sqrt{10}$$

$$i^2 \cdot \sqrt{50}$$

$$\begin{array}{l} \textcircled{5} \nearrow 10 \\ \textcircled{5} \boxed{2} \end{array}$$

$$-5\sqrt{2}$$

$$14. \quad \sqrt{-3} \cdot \sqrt{-6}$$

$$i\sqrt{3} \cdot i\sqrt{6}$$

$$i^2 \sqrt{18}$$

$$\begin{array}{l} \textcircled{3} \nearrow 6 \\ \textcircled{3} \boxed{2} \end{array}$$

$$\textcircled{-3\sqrt{2}}$$

HW Assessment

4. $-2\sqrt{-144}$

$$(-4i\sqrt{5})^2$$

$$16 i^2 5$$

$$16 (-1)(5)$$

$$-80$$

$$\frac{5}{i} \cdot \frac{i}{i} = \frac{5i}{i^2} = \frac{5i}{-1} = -5i$$

$$\frac{7i}{3i} \cdot \frac{i}{i} = \frac{7i}{-3} \quad \checkmark$$

$$\frac{7i}{3i^2}$$

$$\frac{1}{\sqrt{-7}} = \frac{1}{i\sqrt{7}} \cdot \frac{i\sqrt{7}}{i\sqrt{7}} = \frac{i\sqrt{7}}{-7}$$

$$\frac{9}{\sqrt{-9}} = \frac{9}{3i} = \frac{3}{i} \cdot \frac{i}{i} = \frac{3i}{-1} = -3i$$

$$\frac{3i}{i^2} = \frac{3i}{-1}$$

$$\frac{\sqrt{-7}}{2i} = \frac{i\sqrt{7}}{2i} = \frac{\sqrt{7}}{2}$$

your turn

$$1. (-7i\sqrt{10})^2 = 49 \cdot i^2 \cdot 10$$
$$-490$$

$$2. \frac{5}{2i}$$

$$3. \frac{1}{\sqrt{-6}}$$