

4, 5, 11, 12, 15

$$4. \quad -2\sqrt{-144} \\ -2 \cdot 12i = -24i$$

$$5. \quad \sqrt{-20} \\ \begin{array}{c} \swarrow \quad \searrow \\ 2 \quad 10 \\ \swarrow \quad \searrow \\ \quad 2 \quad 5 \end{array} = 2i\sqrt{5}$$

$$12. \quad \sqrt{-6} \cdot \sqrt{2} \\ \begin{array}{c} \swarrow \quad \searrow \\ i\sqrt{6} \quad \sqrt{2} \\ i\sqrt{12} \\ \swarrow \quad \searrow \\ 6 \quad 2 \\ \swarrow \quad \searrow \\ \quad 3 \quad 2 \end{array} = 2i\sqrt{3}$$

$\rightarrow \sqrt{-1} \cdot 6 - \sqrt{-1} \cdot \sqrt{6} = i\sqrt{6}$

$$11. \quad \sqrt{7} \cdot \sqrt{-7} \\ \sqrt{7} \cdot i\sqrt{7} \\ 7i$$

$$14. \quad \sqrt{-3} \cdot \sqrt{-6} \\ i\sqrt{3} \cdot i\sqrt{6} \\ i^2 \sqrt{18} \\ \begin{array}{c} \swarrow \quad \searrow \\ 3 \quad 6 \\ \swarrow \quad \searrow \\ \quad 3 \quad 3 \end{array} \\ -3\sqrt{2}$$

$$15. \quad (7i)^2 = 49i^2 = -49$$

HW Assessment
4/15

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

$$(3i\sqrt{5})^2$$

$$9i^2 \cdot 5$$

$$9(-1)(5) = \textcircled{-45}$$

$$\frac{6}{i} \cdot \frac{i}{i} = \frac{6i}{i^2} = \frac{6i}{-1} = -6i$$

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

$$\frac{7}{\sqrt{-3}} = \frac{7}{i\sqrt{3}} \cdot \frac{i\sqrt{3}}{i\sqrt{3}} = \frac{7i\sqrt{3}}{i^2 19}$$

$$\frac{7i\sqrt{3}}{-3}$$

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

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

your turn!

$$1) \frac{7}{i}$$

$$2) \frac{6}{1-4}$$