

Handout 4: i Spy and Some Leftover R & D-Answers

1. Simplify: $3\sqrt{-8}$.

$$6\sqrt{2}i$$

2. Simplify: $\sqrt{-81} - \sqrt{100}$.

$$-10 + 9i$$

3. Simplify: i^{101} .

$$i$$

4. Simplify: $\frac{24i^4i^5}{6i^3}$.

$$-4$$

5. Simplify: $(14 + 2i) - (6 - 5i)$.

$$8 + 7i$$

6. Simplify: $(3 + 4i)(2 - 2i)$.

$$14 + 2i$$

7. Simplify completely: $\frac{7}{\sqrt{2}}$.

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

8. Simplify completely: $\frac{6}{\sqrt{2}}$.

$$3\sqrt{2}$$

9. Simplify completely: $\frac{3\sqrt{6}}{\sqrt{7}}$.

$$\frac{3\sqrt{42}}{7}$$

10. Simplify completely: $\left(\frac{7}{\sqrt{2}}\right)\left(\frac{6}{\sqrt{6}}\right)$.

$$7\sqrt{3}$$