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

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

 $6\sqrt{2}i$

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

14 + 2i

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

-10 + 9i

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

3. Simplify: i^{101} .

i

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

 $3\sqrt{2}$

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

-4

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

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

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

$$8 + 7i$$

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

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