Powers of i

For examples 1-4, simplify the given powers of *i*.

1. i^6

2. $2i^{23}$

3. $4i^{97}$

4. $-3i^{203}$

For examples 5-8, perform the given operation and simplify to lowest terms.

5. $i^{20} \bullet i^3$

6. $2i^6 \bullet 3i^7$

7. $8i^5 \bullet 2i^{16}$

8. $-3i^{71} \bullet 2i^{13}$

For examples 9-148, perform the given operations and simplify to lowest terms.

9. $2i(i^3 - i^5)$

10. $3i^3(2i^2 + 5i^5)$

11. $5i^3(6i^7 - 3i^{17})$

12. $-2i^9(3i^3 + 4i^{12})$

13. $i^{100} + i^{101} + i^{102}$

14. $2i^{151} + 4i^{156} - 3i^{157}$

15. $5i^{105} + 6i^{106} + 7i^{107}$

16. $-6i^{108} + 2i^{258} - i^{30}$