

Simplify by eliminating the “i” from the denominator.

1) $\frac{6}{5i}$

2) $\frac{2}{3+i}$

3) $\frac{4+2i}{2-3i}$

4) $\frac{8i}{1+5i}$

5) $\frac{7+i}{-i}$

6) $\frac{1-i\sqrt{2}}{2+i\sqrt{2}}$

Mixed Review: Simplify the following.

7) $2\sqrt{-81}$

8) $(5\sqrt{14})(\sqrt{14})$

9) $\sqrt{99b^2}$

10) $\sqrt{\frac{2}{49}}$

11) $6i \cdot 11i$

12) $(-4i^6)^2$

13) $(12 + 3i) - (5i - 8)$

14) i^{103}

15) $(-1 + 7i) + (9 - 6i)$

16) $(2 - 11i)(3 + 2i)$

17) Solve: $9x^2 + 5 = 0$