

## Rationalizing Imaginary Denominators

**Simplify.**

1)  $\frac{2}{8i}$

2)  $\frac{3}{5i}$

3)  $\frac{-5}{-5i}$

4)  $\frac{-1}{-9i}$

5)  $\frac{6}{-4i}$

6)  $\frac{6+8i}{9i}$

7)  $\frac{4-9i}{-6i}$

8)  $\frac{-3+10i}{-6i}$

9)  $\frac{-1+8i}{-i}$

10)  $\frac{10-10i}{-5i}$

11)  $\frac{5i}{-2-6i}$

12)  $\frac{8i}{-1+3i}$

$$13) \frac{1}{-8 - 5i}$$

$$14) \frac{i}{-2 - 8i}$$

$$15) \frac{4}{-3 - 6i}$$

$$16) \frac{-10 - 5i}{-6 + 6i}$$

$$17) \frac{-5 - 9i}{9 + 8i}$$

$$18) \frac{-4 + 10i}{3 + 4i}$$

$$19) \frac{-5 - 3i}{7 - 10i}$$

$$20) \frac{-3 - 7i}{7 + 10i}$$

$$21) \frac{-1 + i}{-5i}$$

$$22) \frac{-6 - i}{i}$$

$$23) \frac{2 + 5i}{-i}$$

$$24) \frac{-4 - 4i}{4i}$$

$$25) \frac{3}{-i}$$

$$26) \frac{a}{ib}$$

## Rationalizing Imaginary Denominators

**Simplify.**

1)  $\frac{2}{8i}$

$-\frac{i}{4}$

2)  $\frac{3}{5i}$

$-\frac{3i}{5}$

3)  $\frac{-5}{-5i}$

$-i$

4)  $\frac{-1}{-9i}$

$-\frac{i}{9}$

5)  $\frac{6}{-4i}$

$\frac{3i}{2}$

6)  $\frac{6+8i}{9i}$

$\frac{-6i+8}{9}$

7)  $\frac{4-9i}{-6i}$

$\frac{4i+9}{6}$

8)  $\frac{-3+10i}{-6i}$

$\frac{-3i-10}{6}$

9)  $\frac{-1+8i}{-i}$

$-i-8$

10)  $\frac{10-10i}{-5i}$

$2i+2$

11)  $\frac{5i}{-2-6i}$

$\frac{-i-3}{4}$

12)  $\frac{8i}{-1+3i}$

$\frac{-4i+12}{5}$

$$13) \frac{1}{-8-5i}$$
$$\frac{-8+5i}{89}$$

$$14) \frac{i}{-2-8i}$$
$$\frac{-i-4}{34}$$

$$15) \frac{4}{-3-6i}$$
$$\frac{-4+8i}{15}$$

$$16) \frac{-10-5i}{-6+6i}$$
$$\frac{5+15i}{12}$$

$$17) \frac{-5-9i}{9+8i}$$
$$\frac{-117-41i}{145}$$

$$18) \frac{-4+10i}{3+4i}$$
$$\frac{28+46i}{25}$$

$$19) \frac{-5-3i}{7-10i}$$
$$\frac{-5-71i}{149}$$

$$20) \frac{-3-7i}{7+10i}$$
$$\frac{-91-19i}{149}$$

$$21) \frac{-1+i}{-5i}$$
$$\frac{-i-1}{5}$$

$$22) \frac{-6-i}{i}$$
$$6i-1$$

$$23) \frac{2+5i}{-i}$$
$$2i-5$$

$$24) \frac{-4-4i}{4i}$$
$$i-1$$

$$25) \frac{3}{-i}$$
$$3i$$

$$26) \frac{a}{ib}$$
$$-\frac{ia}{b}$$