

# Rationalizing Denominators

Name \_\_\_\_\_

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Date \_\_\_\_\_

**Simplify.**

1)  $\frac{4\sqrt{3}}{\sqrt{6}}$

2)  $\frac{\sqrt{8}}{\sqrt{6}}$

3)  $\frac{7}{8\sqrt{8}}$

4)  $\frac{\sqrt{7}}{6\sqrt{8}}$

5)  $\frac{2}{-1 - \sqrt{10}}$

6)  $\frac{\sqrt{7}}{8\sqrt{70}}$

7)  $\frac{-5 + 4\sqrt{5}}{\sqrt{5}}$

8)  $\frac{-3 + \sqrt{6}}{2 + \sqrt{2}}$

$$9) \frac{2}{6-5i}$$

$$10) \frac{-5-10i}{-6+4i}$$

$$11) \frac{-7+6i}{2-6i}$$

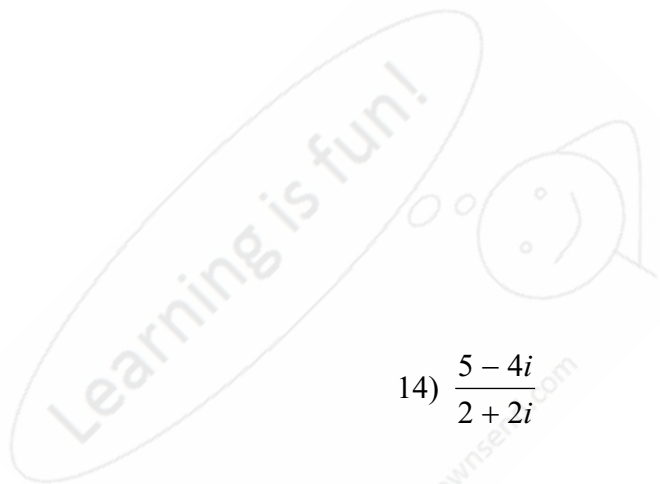
$$12) \frac{-1-2i}{-4+i}$$

$$13) \frac{-10-3i}{-6+2i}$$

$$14) \frac{5-4i}{2+2i}$$

$$15) \frac{2}{3-3i}$$

$$16) \frac{-5-2i}{-2+7i}$$



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## Answers to Rationalizing Denominators

1)  $2\sqrt{2}$

2)  $\frac{2\sqrt{3}}{3}$

3)  $\frac{7\sqrt{2}}{32}$

4)  $\frac{\sqrt{14}}{24}$

5)  $\frac{2 - 2\sqrt{10}}{9}$

6)  $\frac{\sqrt{10}}{80}$

7)  $-\sqrt{5} + 4$

8)  $\frac{-6 + 3\sqrt{2} + 2\sqrt{6} - 2\sqrt{3}}{2}$

9)  $\frac{12 + 10i}{61}$

10)  $\frac{-5 + 40i}{26}$

11)  $\frac{-5 - 3i}{4}$

12)  $\frac{2 + 9i}{17}$

13)  $\frac{27 + 19i}{20}$

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

15)  $\frac{1 + i}{3}$

16)  $\frac{-4 + 39i}{53}$

