

Topic 5.6  
Radical expressions  
Homework

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Simplify**

1.  $\sqrt{20}$   
 $\sqrt{8y^6}$

2.  $\sqrt{75}$

3.  $3\sqrt{18}$

4.

5.  $\sqrt{y^5}$

6.  $\sqrt{10a^4b^7}$

7.  $4\sqrt{7} + 8\sqrt{7} - 2\sqrt{14}$

8.  $(3\sqrt{6})(4\sqrt{3})$

9.  $\sqrt{50} + \sqrt{32} - \sqrt{72}$

10.  $\sqrt{6} \cdot \sqrt{5} \cdot \sqrt{3}$

11.  $\sqrt[3]{40x^7y^{11}}$

12.  $(\sqrt{4} + \sqrt{5})(\sqrt{4} - \sqrt{5})$

13.  $(\sqrt{2} + \sqrt{3})^2$

14.  $\sqrt[5]{32x^{13}y^{14}z^{12}}$

15.  $-2\sqrt{6}(4\sqrt{6} - 8\sqrt{8})$