

## Day 6: Multiplying, Adding &amp; Subtracting Radicals

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

## Practice Assignment

0 25 50 75 100

---

**Multiplying Radicals**

---

1.  $\sqrt{3} \cdot 2\sqrt{6}$

2.  $4\sqrt{5} \cdot 2\sqrt{5}$

3.  $-3\sqrt{2} \cdot 7\sqrt{36}$

4.  $3\sqrt{x} \cdot 2\sqrt{x^2}$

5.  $\sqrt{18a^2} \cdot 4\sqrt{3a^2}$

6.  $\sqrt{50x} \cdot -4\sqrt{4x}$

7.  $-3\sqrt{7x^3} \cdot 6\sqrt{7x^2}$

8.  $\sqrt{xy} \cdot \sqrt{x^2y^3}$

9.  $x\sqrt{x^2yz} \cdot xy\sqrt{yz^3}$ 

---

---

**Adding & Subtracting Radicals**

---

**Simplify:**

1.  $6\sqrt{6} - 2\sqrt{6}$

2.  $-3\sqrt{7} + 4\sqrt{7}$

3.  $-10\sqrt{5} + 12\sqrt{5}$

4.  $2\sqrt{6} - 2\sqrt{24}$

5.  $2\sqrt{6} + 3\sqrt{54}$

6.  $3\sqrt{8} + 3\sqrt{2}$

7.  $3\sqrt{18} - 2\sqrt{2}$

8.  $-3\sqrt{20} - \sqrt{80} + 8\sqrt{3}$

9.  $5\sqrt{2}(3\sqrt{10} - 2\sqrt{5})$

10.  $\sqrt{45x^3} - \sqrt{20x^3}$

11.  $5\sqrt{16x^4} + 3\sqrt{25x^4}$ 

---