

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

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

**Multiplying Radical Expressions****Simplify.**

1)  $2\sqrt{20x^2} \times \sqrt{5x^2}$

2)  $(2 - 2\sqrt{3})(-2 + \sqrt{3})$

3)  $5\sqrt{42} \times \sqrt{3}$

4)  $-12\sqrt{7x} \times \sqrt{5x^3}$

5)  $\sqrt{12}(3 + \sqrt{3})$

6)  $(\sqrt{5} - \sqrt{3})(\sqrt{5} + \sqrt{3})$

7)  $\sqrt{18x}(4 + \sqrt{6x})$

8)  $\sqrt{12x^2} \times \sqrt{14x^3}$

9)  $(11 - 4\sqrt{5})(6 - \sqrt{5})$

10)  $\sqrt{3x}(6x^3 + \sqrt{27})$



$$1) 2\sqrt{20x^2} \times \sqrt{5x^2}$$

$$20x^2$$

$$2) (2 - 2\sqrt{3})(-2 + \sqrt{3})$$

$$6\sqrt{3} - 10$$

$$3) 5\sqrt{42} \times \sqrt{3}$$

$$15\sqrt{4}$$

$$4) -12\sqrt{7x} \times \sqrt{5x^3}$$

$$-12x^2 \cdot \sqrt{35x}$$

$$5) \sqrt{12}(3 + \sqrt{3})$$

$$6\sqrt{3} + 6$$

$$6) (\sqrt{5} - \sqrt{3})(\sqrt{5} + \sqrt{3})$$

$$2$$

$$7) \sqrt{18x}(4 + \sqrt{6x})$$

$$3\sqrt{14x} - 2x\sqrt{7}$$

$$8) \sqrt{12x^2} \times \sqrt{14x^3}$$

$$2x^2\sqrt{42x}$$

$$9) (11 - 4\sqrt{5})(6 - \sqrt{5})$$

$$-35\sqrt{5} + 86$$

$$10) \sqrt{3x}(6x^3 + \sqrt{27})$$

$$18\sqrt{3} \cdot x^2 + 9x$$