

Name : _____

Score : _____

Teacher : _____

Date : _____

Multiplying Radical Expressions

Simplify the Radical Expressions.

1) $(\sqrt{2} + \sqrt{11})(\sqrt{2} - \sqrt{11})$

6) $-2\sqrt{12}(7\sqrt{45} + 4\sqrt{112})$

2) $(-5\sqrt{7} + 3\sqrt{5})(3\sqrt{7} + 4\sqrt{5})$

7) $-6\sqrt{27} \cdot 7\sqrt{44}$

3) $-\sqrt{32d}(\sqrt{20d^2} - \sqrt{27d^3})$

8) $-3\sqrt{99p}(-\sqrt{20p^2} - 7\sqrt{112p^3})$

4) $-\sqrt{48g} \cdot -\sqrt{20g}$

9) $\sqrt{48q} \cdot \sqrt{8q}$

5) $(-7\sqrt{5h^2} + \sqrt{3})(-6\sqrt{5h^2} - 2\sqrt{3})$

10) $-\sqrt{99} \cdot \sqrt{48}$



Name : _____

Score : _____

Teacher : _____

Date : _____

Multiplying Radical Expressions

Simplify the Radical Expressions.

$$1) (\sqrt{2} + \sqrt{11})(\sqrt{2} - \sqrt{11})$$
$$-9$$

$$6) -2\sqrt{12}(7\sqrt{45} + 4\sqrt{112})$$
$$-84\sqrt{15} - 64\sqrt{21}$$

$$2) (-5\sqrt{7} + 3\sqrt{5})(3\sqrt{7} + 4\sqrt{5})$$
$$-45 - 11\sqrt{35}$$

$$7) -6\sqrt{27} \cdot 7\sqrt{44}$$
$$-252\sqrt{33}$$

$$3) -\sqrt{32d}(\sqrt{20d^2} - \sqrt{27d^3})$$
$$-8d\sqrt{10d} + 12d^2\sqrt{6}$$

$$8) -3\sqrt{99p}(-\sqrt{20p^2} - 7\sqrt{112p^3})$$
$$18p\sqrt{55p} + 252p^2\sqrt{77}$$

$$4) -\sqrt{48g} \cdot -\sqrt{20g}$$
$$8g\sqrt{15}$$

$$9) \sqrt{48q} \cdot \sqrt{8q}$$
$$8q\sqrt{6}$$

$$5) (-7\sqrt{5h^2} + \sqrt{3})(-6\sqrt{5h^2} - 2\sqrt{3})$$
$$210h^2 + 8h\sqrt{15} - 6$$

$$10) -\sqrt{99} \cdot \sqrt{48}$$
$$-12\sqrt{33}$$

