

Name : _____

Score : _____

Teacher : _____

Date : _____

Multiplying Radical Expressions

Simplify the Radical Expressions.

1) $(-\sqrt{7} + \sqrt{5})(-\sqrt{7} + \sqrt{5})$

6) $\sqrt{44k} \cdot -\sqrt{45k}$

2) $\sqrt{32c}(\sqrt{28c^2} + \sqrt{27c^3})$

7) $-\sqrt{112}(-\sqrt{27} + \sqrt{8})$

3) $\sqrt{28}(\sqrt{18} + \sqrt{80})$

8) $-\sqrt{44} \cdot 5\sqrt{45}$

4) $(-7\sqrt{3g^2} + 3\sqrt{2})(6\sqrt{3g^2} - 4\sqrt{2})$

9) $-2\sqrt{44} \cdot 6\sqrt{63}$

5) $(4\sqrt{5h^2} - 6\sqrt{3})(-5\sqrt{5h^2} - \sqrt{3})$

10) $2\sqrt{45r}(7\sqrt{44r^2} - \sqrt{48r^3})$



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Simplify the Radical Expressions.

1) $(-\sqrt{7} + \sqrt{5})(-\sqrt{7} + \sqrt{5})$

$12 - 2\sqrt{35}$

6) $\sqrt{44k} \cdot -\sqrt{45k}$

$-6k\sqrt{55}$

2) $\sqrt{32c}(\sqrt{28c^2} + \sqrt{27c^3})$

$8c\sqrt{14c} + 12c^2\sqrt{6}$

7) $-\sqrt{112}(-\sqrt{27} + \sqrt{8})$

$12\sqrt{21} - 8\sqrt{14}$

3) $\sqrt{28}(\sqrt{18} + \sqrt{80})$

$6\sqrt{14} + 8\sqrt{35}$

8) $-\sqrt{44} \cdot 5\sqrt{45}$

$-30\sqrt{55}$

4) $(-7\sqrt{3g^2} + 3\sqrt{2})(6\sqrt{3g^2} - 4\sqrt{2})$

$-126g^2 + 46g\sqrt{6} - 24$

9) $-2\sqrt{44} \cdot 6\sqrt{63}$

$-72\sqrt{77}$

5) $(4\sqrt{5h^2} - 6\sqrt{3})(-5\sqrt{5h^2} - \sqrt{3})$

$-100h^2 + 26h\sqrt{15} + 18$

10) $2\sqrt{45r}(7\sqrt{44r^2} - \sqrt{48r^3})$

$84r\sqrt{55r} - 24r^2\sqrt{15}$

