

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

# Math is Gold

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

**Topic: Radicals**

(id:rad\_add\_A.1)

**Title: Simplify the radicals**

1)  $2\sqrt{a} + 5\sqrt{b} + 3\sqrt{a} - 7\sqrt{b}$

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

3)  $7\sqrt{m} - 10\sqrt{n} + 15\sqrt{m} - 2\sqrt{n}$

4)  $2\sqrt{9x} - 3\sqrt{4y} + 2\sqrt{36x} + 2\sqrt{81y}$

5)  $\sqrt{81a} - \sqrt{100b} + \sqrt{25a} + \sqrt{400b}$

6)  $2\sqrt{xy} - 9\sqrt{yz} + 7\sqrt{xy} + 2\sqrt{yz}$

$$7) \sqrt{mn} + \sqrt{9np} - \sqrt{16mn} + \sqrt{np}$$

$$8) 3\sqrt{ab} - \sqrt{16bc} - \sqrt{9ab} + 4\sqrt{bc}$$

$$9) 2\sqrt{pq} + \sqrt{qr} - \sqrt{144pq} + \sqrt{81qr}$$

$$10) \sqrt{fg} - \sqrt{25gh} + 5\sqrt{fg} - \sqrt{81gh}$$

$$11) 2\sqrt{9xyz} - 3\sqrt{xyz} + 4\sqrt{xyz}$$

$$12) 3\sqrt{pqr} - 4\sqrt{25pqr} + 5\sqrt{9pqr}$$

$$13) \sqrt{121abc} - \sqrt{256abc} + \sqrt{144abc}$$

$$14) 5\sqrt{lmn} - 2\sqrt{36lmn} + 2\sqrt{4lmn}$$

$$15) 3\sqrt{fgh} - 2\sqrt{81fgh} + 2\sqrt{100fgh}$$