☐ **DO NOW – Geometry Regents Lomac 2014-2015** **Date** ____. **due** ____. **Similarity Simplifying Radicals** | **7.1**

(DN) ON BACK OF PACKET

Name _____**Per**_____

LO: I can simplify radical expressions including adding, subtracting, multiplying, dividing and rationalizing denominators.

☐ (1) calculator **Simplifying Radicals: Finding hidden perfect squares and taking their root.**

Simplify each expression by factoring to find perfect squares and then taking their root.

1) $\sqrt{75}$

2) $\sqrt{16}$

3) $\sqrt{36}$

4) $\sqrt{64}$

5) $\sqrt{80}$

6) $\sqrt{30}$

7) $\sqrt{8}$

8) $\sqrt{18}$

9) $\sqrt{32}$

10) $\sqrt{12}$

11) $\sqrt{8}$

12) $\sqrt{108}$

13) $\sqrt{125}$

14) $\sqrt{50}$

15) $\sqrt{175}$

16) $\sqrt{28}$

17) $\sqrt{45}$

18) $\sqrt{72}$

19) $\sqrt{20}$

20) $\sqrt{150}$

☐ (3) calculator **Simplifying Radical Expressions: Multiplying**

☐ (a) Multiply numbers that are BOTH OUTSIDE the radical.
Multiply numbers that are BOTH INSIDE the radical.
Simplify the expression

$2 \cdot 5 =$ _____ $2 \cdot \sqrt{5} =$_____ $\sqrt{2} \cdot 5 =$_____

$2\sqrt{3} \cdot 5 =$_____ $2\sqrt{3} \cdot \sqrt{5} =$_____ $2\sqrt{3} \cdot 4\sqrt{5} =$_____

1) $\sqrt{6} \cdot 4\sqrt{6}$

2) $-\sqrt{5} \cdot \sqrt{20}$

3) $-\sqrt{2} \cdot \sqrt{3}$

4) $4\sqrt{8} \cdot \sqrt{2}$

5) $\sqrt{12} \cdot \sqrt{15}$

6) $\sqrt{5} \cdot -2\sqrt{5}$

7) $-3\sqrt{5} \cdot \sqrt{20}$

8) $\sqrt{15} \cdot 3\sqrt{5}$

9) $\sqrt{9} \cdot \sqrt{3}$

10) $-4\sqrt{8} \cdot \sqrt{10}$