

**Geometry**

**Unit Two: Post-Assessment Simplifying Radicals Practice (HW8)**

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

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

**Rewrite the following radicals in the most simplified form.**

Ex.  $\sqrt{96}$

Option 1: Use the largest perfect square.

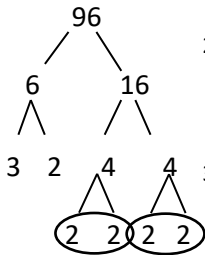
$$\sqrt{96} = \sqrt{16 \cdot 6} = 4\sqrt{6}$$

Rewrite 80 as a product of the largest possible perfect square and another number.

Square root the perfect square to simplify.

Option 2: Use a factor tree.

1. Circle pairs of factors.



2. One of part of each pair moves outside radical and multiplies.

3. Uncircled factors return to radical and multiply.

$$2 \cdot 2\sqrt{3 \cdot 2} = 4\sqrt{6}$$

a)  $\sqrt{12}$

b)  $\sqrt{40}$

c)  $\sqrt{18}$

d)  $\sqrt{75}$

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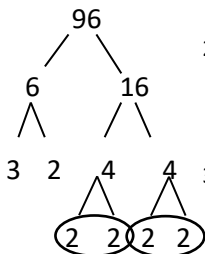
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e)  $\sqrt{48}$

f)  $\sqrt{128}$

g)  $\sqrt{24}$

h)  $\sqrt{98}$

i)  $\sqrt{72}$

j)  $\sqrt{540}$

e)  $\sqrt{48}$

f)  $\sqrt{128}$

g)  $\sqrt{24}$

h)  $\sqrt{98}$

i)  $\sqrt{72}$

j)  $\sqrt{540}$