Warm up:

1. Between which two consecutive integers is $\sqrt{140}$?

2. Compare the following two numbers using <, >, or =.

   4^2 _____ $\sqrt{258}$

3. Order the following numbers from least to greatest.

   $\sqrt{81}$, 8.7, $\sqrt{97}$, 9.2

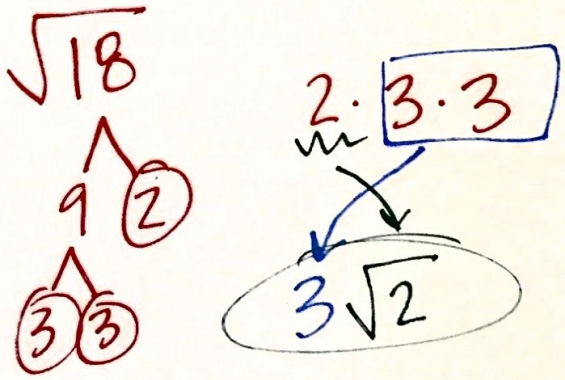
Rules for Simplifying Roots:

① Factor Tree

② List out the factors, BOX the pairs

③ one comes out of the pair, everything else stays in.

④ Multiply outside & Multiply inside

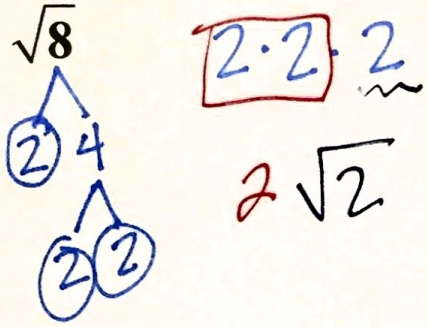


$\sqrt{9}\,\sqrt{2}$

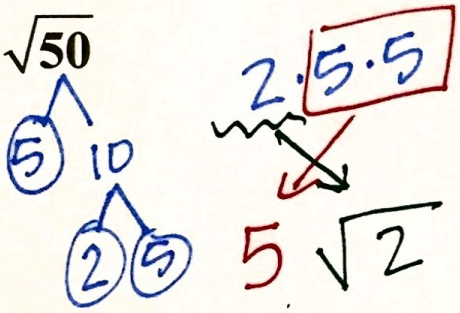
$3\sqrt{2}$

Simplify the expression.

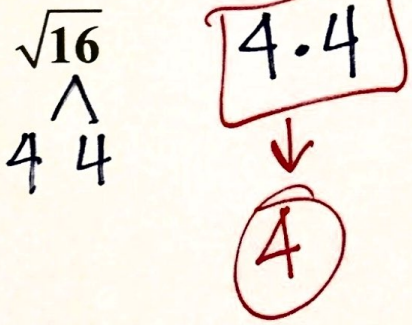
Ex. 1: $\sqrt{8}$



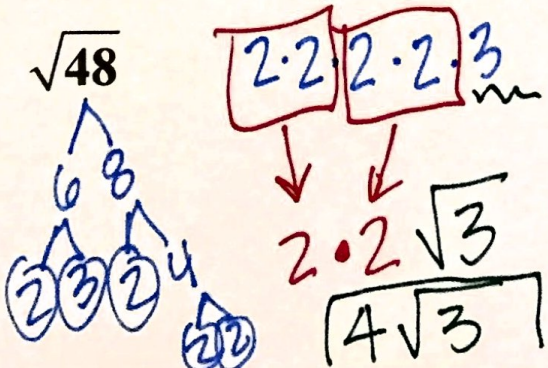
Ex. 2: $\sqrt{50}$



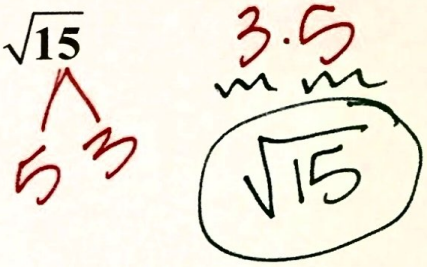
Ex. 3: $\sqrt{16}$



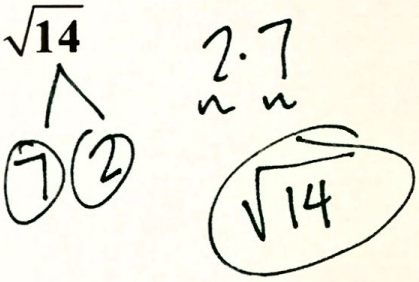
Ex. 4: $\sqrt{48}$



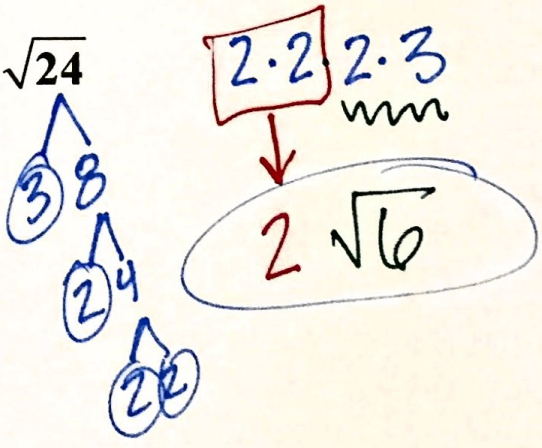
Ex. 5: $\sqrt{15}$



Ex. 6: $\sqrt{14}$



Ex. 7: $\sqrt{24}$



Ex. 8: $\sqrt{96}$