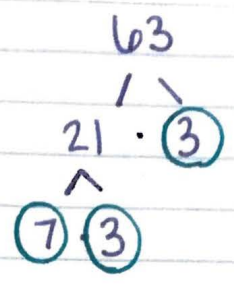


1.4 Simplifying Radicals $\sqrt{\quad}$

8/30/19

Ex 1: Simplify $\sqrt{63}$

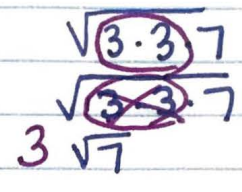
Step 1: Make a factor tree and circle prime numbers.



Step 2: Write the prime numbers under the radical

$$\sqrt{3 \cdot 3 \cdot 7}$$

Step 3: Circle the pairs.
Step 4: Cross out pairs and bring that number out once.

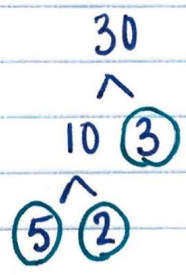
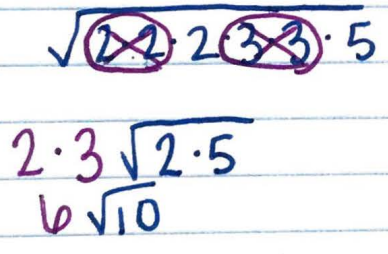
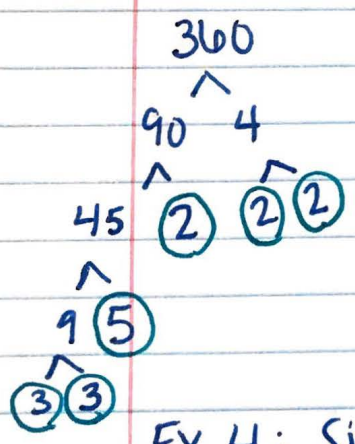


Step 5: Finish multiplying

$$3\sqrt{7}$$

Ex 2 simplify $\sqrt{360}$

Ex 3 Simplify $\sqrt{30}$



$$\sqrt{2 \cdot 3 \cdot 5} \quad * \text{no pairs}$$

$$\sqrt{30}$$

Ex 4: Simplify $i\sqrt{32}$

Ex 5: Simplify $i\sqrt{64}$

