

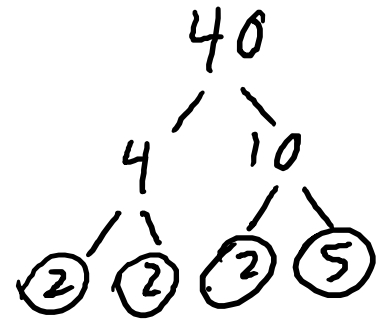
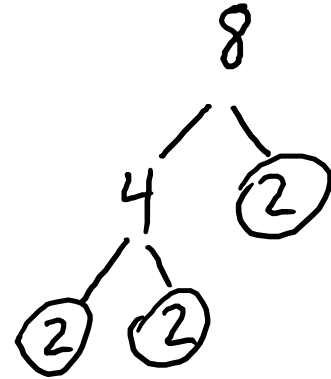
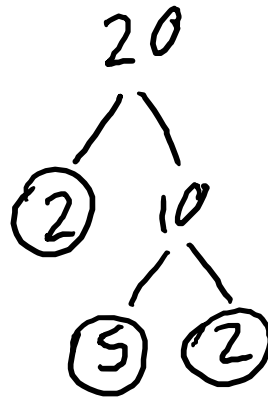
Simplifying Radicals

Simplify

$$\sqrt{8} = 2\sqrt{2}$$

$$\sqrt{20} = 2\sqrt{5}$$

$$\sqrt{40} = 2\sqrt{10}$$

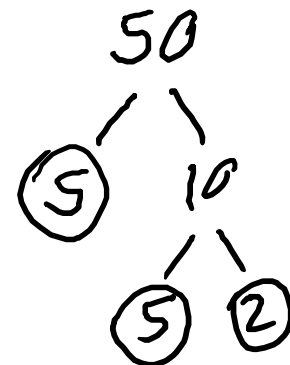
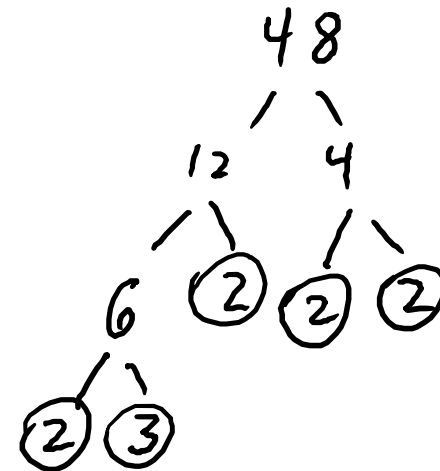
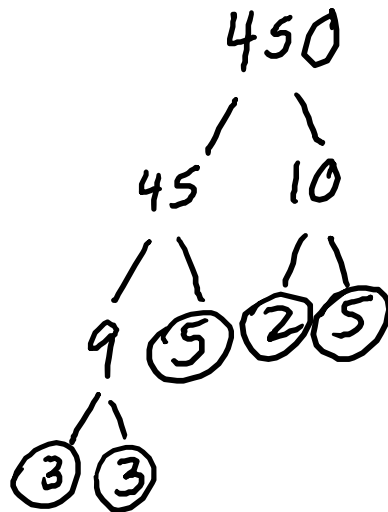


Simplify

$$\sqrt{48} = 4\sqrt{3}$$

$$\sqrt{50} = 5\sqrt{2}$$

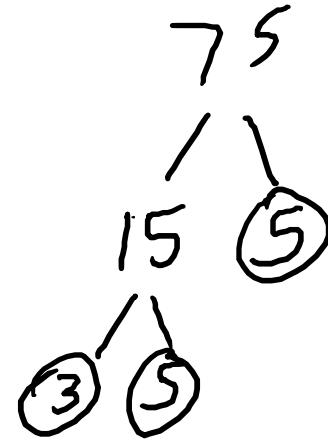
$$\sqrt{450} = 15\sqrt{2}$$



Simplify

$$\sqrt{18}$$

$$\rightarrow \sqrt{75} = 5\sqrt{3}$$



$$\sqrt{24}$$

$$\sqrt{72}$$

$$\sqrt{5}\sqrt{5} = \del{25} 5$$

$$\sqrt{7}\sqrt{7} = 7$$

$$\sqrt{8}\sqrt{8} = 8$$

With fractions, we can't have a radical on the bottom...

- We will multiply top and bottom by the thing causing problems.

$$\frac{\sqrt{6} \cdot \sqrt{7}}{\sqrt{7} \cdot \sqrt{7}} = \frac{\sqrt{42}}{7}$$

$$\frac{8 \cdot \sqrt{2}}{\sqrt{2} \cdot \sqrt{2}} = \frac{8\sqrt{2}}{2} = 4\sqrt{2}$$

$$\frac{\sqrt{11} \cdot \sqrt{3}}{\underbrace{2\sqrt{3} \cdot \sqrt{3}}_3} = \frac{\sqrt{33}}{6}$$