

More w/
Radicals

Warm-Up Problems
Do These NOW Before Class!!!!

<p>ex1) $\frac{1}{6} \sqrt{25}$</p>	<p>ex3) $\frac{3}{5} \sqrt{300}$</p>
<p>ex2) $\frac{1}{20} \sqrt{75}$</p>	

- Py 508, 509, 515
- | | | |
|--|--|--|
| <p>(18) ± 3</p> <p>(20) $\pm \sqrt{17}$</p> <p>(22) $\pm \sqrt{15}$</p> <p>(24) No Solⁿ</p> <p>(26) $\pm \sqrt{39}$</p> <p>(28) 0</p> <p>(30) ± 20</p> | <p>(32) No Solⁿ</p> <p>(34) ± 10</p> <p>(36) $\pm \sqrt{5}$</p> <p>(38) ± 8</p> <p>(40) ± 4</p> <p>(42) No Solⁿ</p> <p>(50) \pm</p> <p>(51) \pm</p> <p>(52) \pm</p> | <p>(53) \pm</p> <p>(54) \pm</p> <p>(55) \pm</p> <hr style="border: 1px solid red;"/> <p>(48) $\frac{\sqrt{30}}{6}$</p> <p>(52) $\frac{\sqrt{15}}{7}$</p> <p>(56) $\frac{\sqrt{6}}{2}$</p> <p>(60) 90</p> <p>(64) $6\sqrt{11}$</p> <p>(68) $\frac{\sqrt{14}}{4}$</p> <p>(72) $\frac{-2\sqrt{10}}{5}$</p> |
|--|--|--|

$$\text{ex1} \quad \frac{1}{6} \sqrt{27}$$

$$= \frac{1}{6} \sqrt{9} \cdot \sqrt{3}$$

$$= \frac{1}{\cancel{6}_2} \cdot 3 \cdot \sqrt{3}$$

$$= \underline{\underline{\frac{1}{2} \sqrt{3}}}$$

$$\text{ex2} \quad \frac{1}{20} \sqrt{75}$$

$$= \frac{1}{20} \sqrt{25} \cdot \sqrt{3}$$

$$= \frac{1}{\cancel{20}_4} \cdot 5 \cdot \sqrt{3} = \underline{\underline{\frac{1}{4} \sqrt{3}}}$$

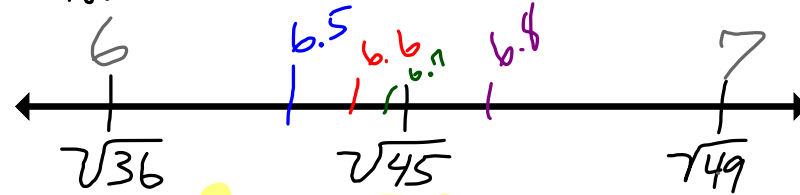
$$\text{ex3} \quad \frac{3}{5} \sqrt{300}$$

$$= \frac{3}{5} \sqrt{100} \cdot \sqrt{3}$$

$$= \frac{3}{\cancel{5}_1} \cdot 10 \sqrt{3} = \underline{\underline{6 \sqrt{3}}}$$

Not in
the Book

Approx $\sqrt{45}$ to the
Nearest tenth.



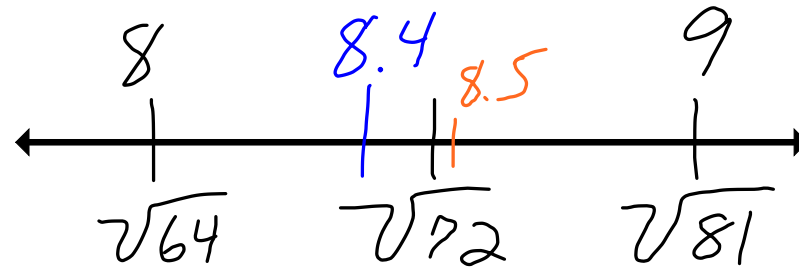
<p>Guess 6.5</p> $\begin{array}{r} 6.5 \\ \times 6.5 \\ \hline 325 \\ 3900 \\ \hline 4225 \end{array}$ <p>2.75 away</p>	<p>Now Guess 6.6</p> $\begin{array}{r} 6.6 \\ \times 6.6 \\ \hline 4356 \end{array}$ <p>1.44 away</p>	<p>Now Guess 6.7</p> $\begin{array}{r} 6.7 \\ \times 6.7 \\ \hline 4489 \end{array}$ <p>1.1 away</p>	<p>6.8</p> $\begin{array}{r} 6.8 \\ \times 6.8 \\ \hline 4624 \end{array}$ <p>1.24 away</p>
---	---	--	---

So...

$$\underline{\underline{\sqrt{45} \approx 6.7}}$$

to the Nearest 10th

$$\sqrt{72}$$



Guess 8.4

$$\begin{array}{r} 8.4 \\ \cdot 8.4 \\ \hline 336 \\ 6720 \\ \hline 7056 \\ \hline 1.44 \\ \text{away} \end{array}$$

Guess 8.5

$$\begin{array}{r} 8.5 \\ \cdot 8.5 \\ \hline 425 \\ 6800 \\ \hline 7225 \\ \hline .25 \\ \text{away} \end{array}$$

$$\underline{\underline{\sqrt{72} \approx 8.5}}$$

O.T.L.

Approx to the Nearest 10^4

① $\sqrt{95}$

② $\sqrt{130}$

③ $\sqrt{60}$