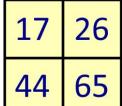
Created by Khamari Dunlap

5/(# of Boston Celtics championships - # of Los Angeles Lakers championships)

We WILL be turning in warmups this week!!!

Give a reason why one of the numbers doesn't belong You <u>must</u>
 come up with at least one reason for all four numbers.



PLEASE GET A WHITEBOARD/ MARKER/ERASER!

REMINDER

- Line designs are due Wednesday.
- You may turn them in anytime. Make sure you have your name on the back, and be sure to turn in your rubric as well.

Schedule

- Estimating Roots
- Simplifying Radicals
- Quiz Thursday

How do you take the square root of a number?

What is a perfect square?

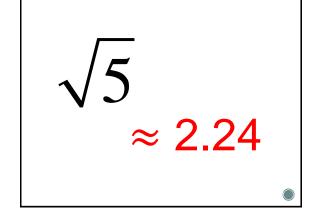
What is a Perfect square?

- "An integer that is a square of an integer"
- ■1, 4, 9, 16, 25, etc.
- Write down as many perfect squares as you can in a minute.

How do you take the cube root of a number?

Estimating Roots

- Your estimates should be to the nearest hundredth (two decimal place)
- 20 seconds per estimate (until we get to harder ones)
- 1 point for being the closest
- 2 points for getting it EXACT



√47 ≈ 6.86 √83 ≈ 9.11

 $\sqrt{18}$ ≈ 4.24

 $\sqrt{2}$ ≈ 1.41

$$\sqrt{56} \approx 7.48$$

$$\sqrt{300}$$

$$\approx 17.32$$

$$\sqrt{215}$$

$$\approx 14.66$$

$$\sqrt[3]{10}$$
 ≈ 2.15

$$\sqrt[3]{70}$$
 ≈ 4.12

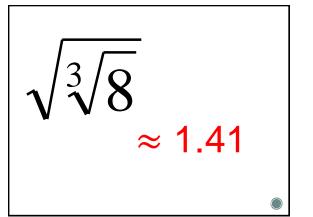
$$\sqrt[3]{25}$$
 ≈ 2.92

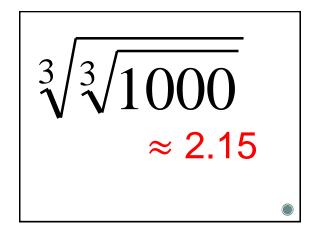
$$\sqrt[3]{400}$$

$$\approx 7.37$$

$$\sqrt[3]{2000}$$

$$\approx 12.59$$



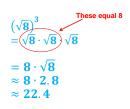


IMPORTANT CONCEPT:

 $\begin{array}{l} \sqrt{16} \cdot \sqrt{16} \\ \sqrt{49} \cdot \sqrt{49} \\ \sqrt{324} \cdot \sqrt{324} \\ \sqrt{37} \cdot \sqrt{37} \\ \sqrt{\$} \cdot \sqrt{\$} \end{array}$

Estimate the value of: These equal 10 $= \sqrt{10} \cdot \sqrt{10}$ $= 10 \cdot \sqrt{10}$ $\approx 10 \cdot 3.2$ ≈ 32

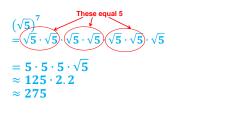
Estimate the value of:



Estimate the value of:

These equal 33 $= \sqrt{33} \cdot \sqrt{33} \sqrt{33}$ $= 33 \cdot \sqrt{33}$ $\approx 33 \cdot 5.7$ ≈ 188.1

Estimate the value of:



The value of an irrational number expression is estimated to be between 18 and 19.
Which could be the expression?

A. $(\sqrt{2})^9$ ONE POINT

B. $(\sqrt{3})^5$

C. $(\sqrt{6})^3$ D

D. $(\sqrt{7})^3$