16 g) $\frac{3}{5} \div \frac{4}{9}$ ← Flip.

Keep ↗ change

$\frac{3}{5} \times \frac{9}{4} = \frac{27}{20}$

3.2 Perfect Squares, Perfect Cubes, and Their Roots

Perfect square: a number that can be written as two identical factors.

$25 = 5 \cdot 5$, $16 = 4 \cdot 4 = (2 \cdot 2) \cdot (2 \cdot 2)$

1, 4, 9, 16, 25, 36, 49, 64, 81, 100, ------

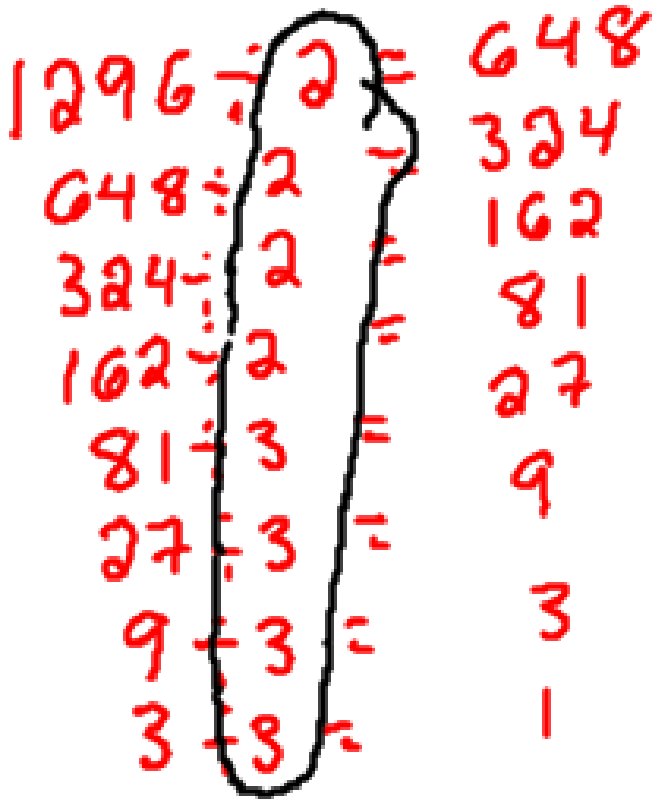
Perfect Cubes: a number that can be written as three identical factors.

$27 = 3 \cdot 3 \cdot 3$

1, 8, 27, 64, 125, 216, ---------

Is 1296 a perfect square?

Prime Factorization



$1296 = (2 \cdot 2)(2 \cdot 2)(3 \cdot 3)(3 \cdot 3)$

if the factors are identical pairs then it is a perfect square.

$1296 = (2 \cdot 2 \cdot 3 \cdot 3)(2 \cdot 2 \cdot 3 \cdot 3)$

$\sqrt{1296} = 36$

Find the cube root of 2744?

Prime Factorization.

$2744 \div 2 = 1372$

$1372 \div 2 = 686$

$686 \div 2 = 343$

$343 \div 7 = 49$

$49 \div 7 = 7$

$7 \div 7 = 1$

$2744 = 2 \cdot 2 \cdot 2 \cdot 7 \cdot 7 \cdot 7$

$2744 = (2 \cdot 7)(2 \cdot 7)(2 \cdot 7)$

$\sqrt[3]{2744} = 2 \cdot 7 = 14$

↑ know calculator buttons.

MATH → 4: $\sqrt[3]{}$

Do p.146 - #4-8, 10