Chapter #3 Pythagorean Relationship

April 15, 2016 11:06 AM

3.1 Square and Square Roots

Square # - is the product (answer when you x) of the same 2 numbers

ex. $3 \times 3 = 9$ ✓ square #

- also known as a perfect square

* a # that is not a perfect square is called a non-perfect square

List all the perfect squares from 1-100

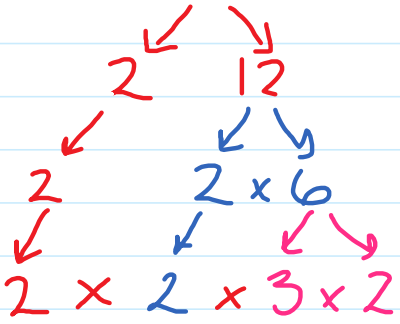
#	Multiply	Answer	$\sqrt{\ } =$
1	1×1	1	$\sqrt{1} = 1$
4	2×2	4	$\sqrt{4} = 2$
9	3×3	9	$\sqrt{9} = 3$
16	4×4	16	$\sqrt{16} = 4$
25	5×5	25	$\sqrt{25} = 5$
36	6×6	36	$\sqrt{36} = 6$
49	7×7	49	$\sqrt{49} = 7$
64	8×8	64	$\sqrt{64} = 8$
81	9×9	81	$\sqrt{81} = 9$
100	10×10	100	$\sqrt{100} = 10$

The symbol for square root is $\sqrt{\ }$ Read $\sqrt{9}$ as the square root of 9

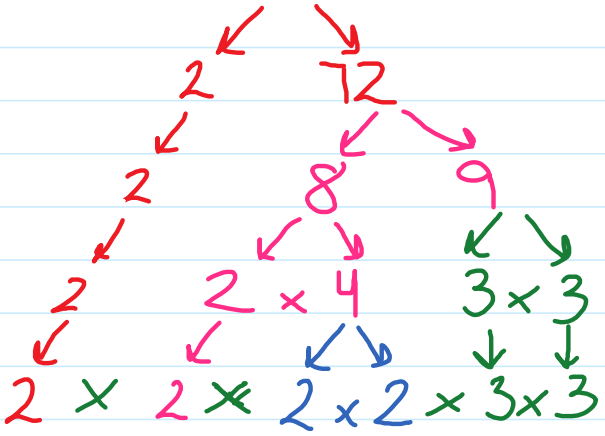
Use prime factorization
↳ in perfect squares there is an even # of each prime factor

ex 1

a) 36

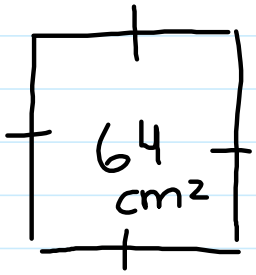


b) 144



Ex #2

Side length



$\sqrt{64}$ = 8 cm

pg 85 # 5-23