August 31, 2016

| | N | W | Z | Q | Q′ | R |
|---|---|---|---|---|---|---|
| 0.16 | | | | ✓ | | ✓ |
| $-\sqrt{5}$ | | | | | ✓ | ✓ |
| $\frac{2}{7}$ | | | | ✓ | | ✓ |
| $-9$ | | | ✓ | ✓ | | ✓ |
| $0$ | | ✓ | ✓ | ✓ | | ✓ |

Aug 31-9:54 AM

$192 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 3 = 2^6 \cdot 3$

$192 \div 2 = 96$

$96 \div 2 = 48$

$48 \div 2 = 24$

$24 \div 2 = 12$

$12 \div 2 = 6$

$6 \div 2 = 3$

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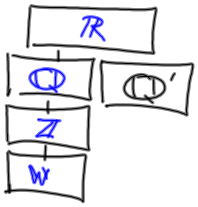
$0.62 = \frac{62}{100} = \frac{31}{50}$

Some whole numbers are irrational.

T or F

$W = \{0, 1, 2, 3, \ldots\}$

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## Exponents

$a^n = a \cdot a \cdot a \cdot \ldots a^n$

($n$ ← exponent; $a$ ← base)

$x^{196}$

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① $(-6)^2 = (-6) \cdot (-6) = 36$ (2 ← even; −6 ← base or)

② $-6^2 = (-1) \cdot 6^2$ (2 ← even; 6 ← Base!)
$= (-1) \cdot 6 \cdot 6$
$= -6 \cdot 6$
$= -36$

① $(-2)^3 = (-2) \cdot (-2) \cdot (-2)$ (3 ← odd)
$= 4 \cdot (-2)$
$= -8$

② $-2^3 = (-1) \cdot 2^3$ (3 ← odd)
$= (-1) \cdot 2 \cdot 2 \cdot 2$
$= (-2) \cdot 2 \cdot 2$
$= (-4) \cdot 2$
$= -8$

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Do CORE 1.1 → "B"

## order of Operations

① Simplify inside Grouping Symbols.
( ), [ ], { }, $\frac{a}{b}$, $|a|$, $\sqrt{a}$
$\frac{24}{3} = 8$ $\sqrt[3]{8} = 2$

② Evolute Exponents. $5^3 = 125$
$-6^2 = -36$

③ Multiplication or Division which ever comes first working from Left to right.

④ Addition or Subtration which ever comes first from L to R.

Aug 31-10:40 AM