

Sept. 26th

Operations with Real Numbers

$$\text{Rational Number} + \text{Rational Number} = \text{Rational Number}$$

$$\text{Rational Number} \cdot \text{Rational Number} = \text{Rational Number}$$

$$\frac{\text{Rational Number}}{\text{Rational Number}} = \text{Rational Number}$$

$$\text{Rational Number} + \text{Irrational Number} = \text{Irrational Number}$$

$4 + \pi = 7.14\dots$

$$\text{Rational Number} \cdot \text{Irrational Number} = \text{Irrational Number}$$

EXCEPT

if the rational number is zero

Perfect Squares

1^2	$= 1$	\Leftrightarrow	$\sqrt{1} = \pm 1$
2^2	$= 4$	\Leftrightarrow	$\sqrt{4} = \pm 2$
3^2	$= 9$	\Leftrightarrow	$\sqrt{9} = \pm 3$
4^2	$= 16$	\Leftrightarrow	$\sqrt{16} = \pm 4$
5^2	$= 25$	\Leftrightarrow	$\sqrt{25} = \pm 5$
6^2	$= 36$	\Leftrightarrow	$\sqrt{36} = \pm 6$
7^2	$= 49$	\Leftrightarrow	$\sqrt{49} = \pm 7$
8^2	$= 64$	\Leftrightarrow	$\sqrt{64} = \pm 8$
9^2	$= 81$	\Leftrightarrow	$\sqrt{81} = \pm 9$
10^2	$= 100$	\Leftrightarrow	$\sqrt{100} = 10$
11^2	$= 121$	\Leftrightarrow	$\sqrt{121} = \pm 11$
12^2	$= 144$	\Leftrightarrow	$\sqrt{144} = \pm 12$
13^2	$= 169$	\Leftrightarrow	$\sqrt{169} = \pm 13$
14^2	$= 196$	\Leftrightarrow	$\sqrt{196} = \pm 14$
15^2	$= 225$	\Leftrightarrow	$\sqrt{225} = \pm 15$

* use this list of perfect squares to estimate imperfect squares to the nearest tenth *