Name _____ Class _____ Date _____

Reteaching 10-3

Finding and Estimating Square Roots

OBJECTIVE: Finding square roots

MATERIALS: Calculator

- In decimal form, a rational number terminates or repeats.
- In decimal form, an irrational number continues without repeating.

Example

Complete the following table involving square roots.

Number	Principal Square Root	Negative Square Root	Rational/ Irrational	Perfect Square or $\sqrt{\ }$ Between Which Consecutive Integers
81	9	-9	rational	perfect square
0.25	0.5	-0.5	rational	perfect square
$\frac{4}{9}$	$\frac{2}{3}$	$-\frac{2}{3}$	rational	perfect square
7	2.645 . . .	-2.645 . . .	irrational	between 2 and 3
-17	undefined	undefined	undefined	undefined

Exercises

Complete the following table involving square roots.

1.

Number	Principal Square Root	Negative Square Root	Rational/ Irrational	Perfect Square or $\sqrt{\ }$ Between Which Consecutive Integers
$\frac{1}{64}$				
26				
23				
-36				
$\frac{81}{324}$				

Simplify each expression, and label it as rational or irrational.

2. $\sqrt{100}$

3. $\sqrt{12}$

4. $\sqrt{-14}$

5. $\sqrt{63}$

6. $-\sqrt{0}$

7. $\sqrt{\frac{1}{9}}$