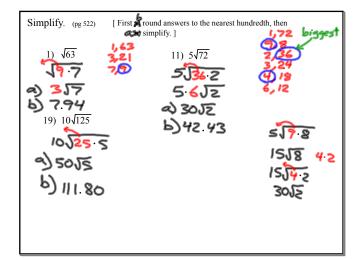# Algebra I
11-4
Irrational Square Roots

Irrational Number - Any number that cannot be written as a Fraction.

π

$\sqrt{2}$

1) non-terminating

2) non-repeating

Simplifying Radicals -

1) No perfect square Factors allowed under the radical.

2) [?] - Coming Soon!

3) [?] - Coming Soon!

Simplify. (pg 522)   [First round answers to the nearest hundredth, then simplify.]

1) $\sqrt{63}$

1,63
3,21
7,9

$\sqrt{9 \cdot 7}$

a) $3\sqrt{7}$
b) 7.94

19) $10\sqrt{125}$

$10\sqrt{25 \cdot 5}$

a) $50\sqrt{5}$
b) 111.80

11) $5\sqrt{72}$

1,72
2,36
3,24
4,18
6,12

biggest

$5\sqrt{36 \cdot 2}$

$5 \cdot 6\sqrt{2}$

a) $30\sqrt{2}$
b) 42.43

$5\sqrt{9 \cdot 8}$

$15\sqrt{8}$ 4·2

$15\sqrt{4 \cdot 2}$

$30\sqrt{2}$

Assignment:

Pg. 522
1-30 all

Do two parts.
b) write as a decimal, rounded to hundredths
a) simplify the radical