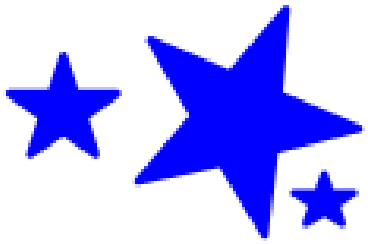
3 - 9
Squares and Square Roots

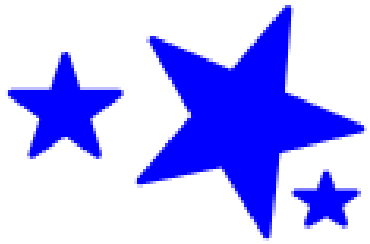
$\sqrt{a^2} = \sqrt{6}$



$a = \sqrt{6}$

$\sqrt{400}$ 2nd x^2 400

6^2 6 x^2 36



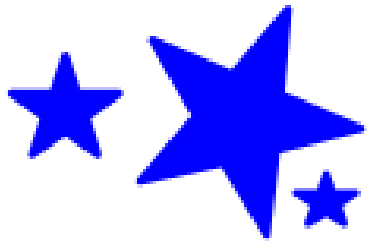
perfect squares: an integer times itself

1, 4, 9, 16, 25, 36, 49, 64, 81, 100, ...
1 2 3 4 5

$\sqrt{7} = 2.6457...$

7 is not a perfect square

Ex: $5^2 = 25$



Ex: $(-3)^2 = 9$

$-3^2 \neq -9$

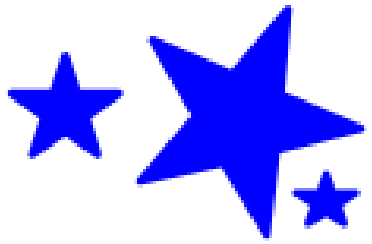
$(-3)^2 = 9$

Ex: $\left(\frac{1}{9}\right)^2 = \frac{1}{81}$

$(1 \div 9)^2$

Ex: $(.25)^2 = .0625$

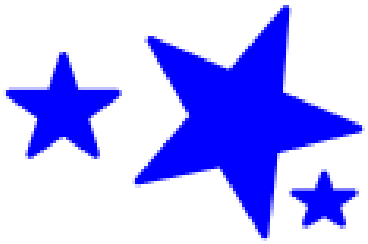
Ex: $\sqrt{20} \approx 4.47$



Ex: $-\sqrt{99} \approx -9.95$

Ex: $\sqrt{\frac{9}{16}} = \frac{3}{4}$

Ex: $\sqrt{.103} \approx .32$



Homework:

p. 144 #18 - 48 even