

Area: how much Stuff fit inside a shape $A = b \cdot h$

Name: _____ Date: _____ Per. _____

U6 CWK # 1 Squares, Squares, and More Squares

- On dot paper from the other side:
 1) Create as many different squares with areas from 1 - 100 as possible. On the grid, a horizontal or vertical segment joining two dots has a length of 1. Each of the vertices of the square must be on a dot.
 2) Find the area of each square you made and label each square with its area.
 3) Complete the table below using the squares you created.

Area	Side Length
1	1
4	2
9	3
16	4
25	5
36	6
49	7
64	8
81	9
100	10

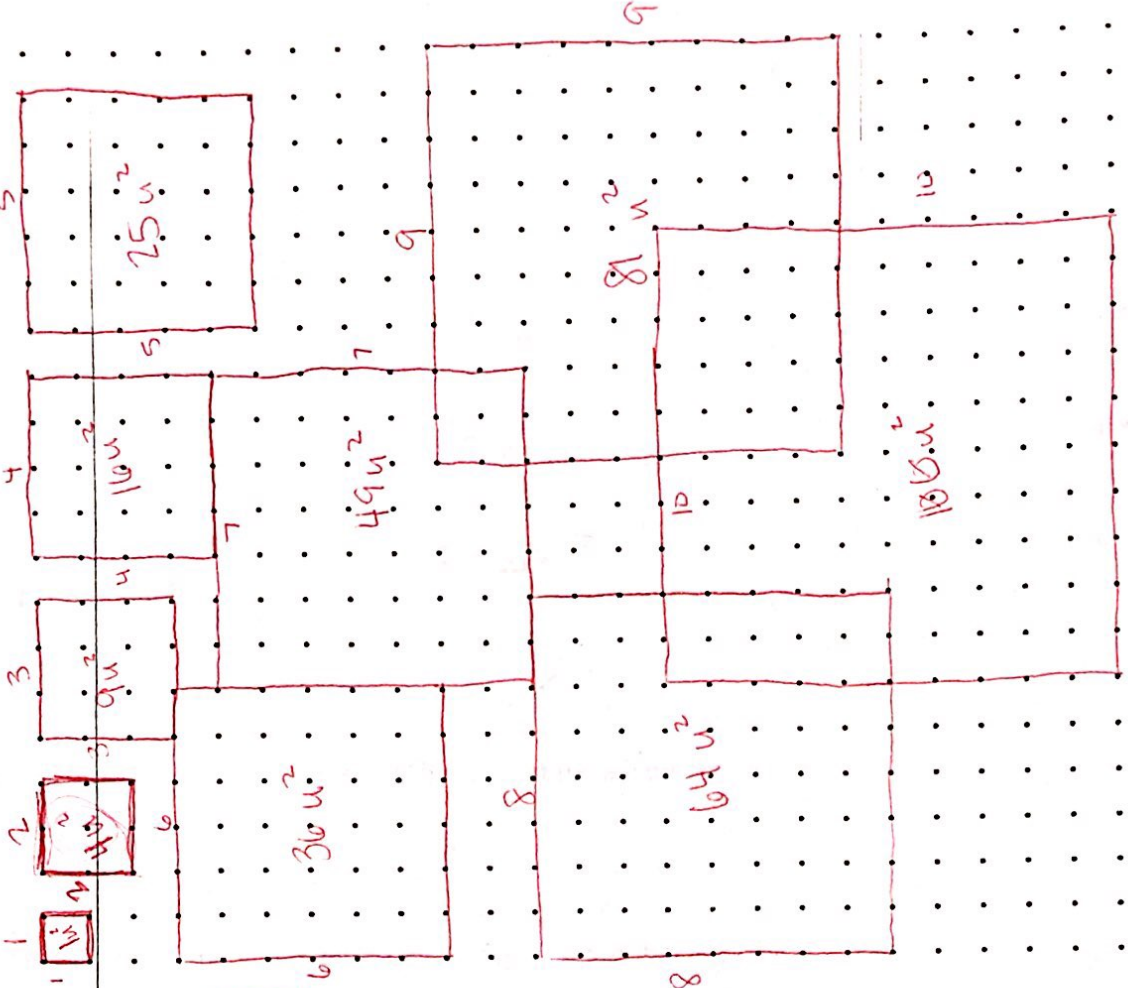
square root (\sqrt{x})

finding the # that multiplies by itself to get the starting #

- base / support / beginning / core
- $2^2 = 4$
 - $3^2 = 9$
 - $4^2 = 16$
 - $5^2 = 25$
 - $\sqrt{4} = 2$
 - $\sqrt{9} = 3$
 - $\sqrt{16} = 4$
 - $\sqrt{25} = 5$

$\sqrt{100} = 10$

side length multiplied by itself (square)



4. Complete the following table

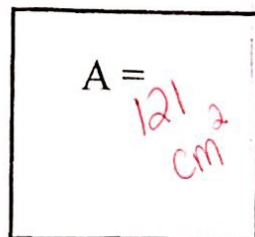
Area (square units)	Length of Side (units)
1	1
9	3
25	5
2	$\sqrt{2}$
5	$\sqrt{5}$
13	$\sqrt{13}$
5	$\sqrt{5}$
100	10
400	20

Irrational $\sqrt{8}$
 π $\sqrt{2}$

$\square 1$
 $\square 9$
 $\square 5$
 $\square 2$
 $\square 5$
 $x+3=3$
 $(\sqrt{13})^2 = 13$

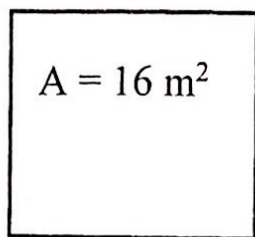
5. Find the missing measure

a.



$s = 11 \text{ cm}$

b.



$s = 4 \text{ m}$

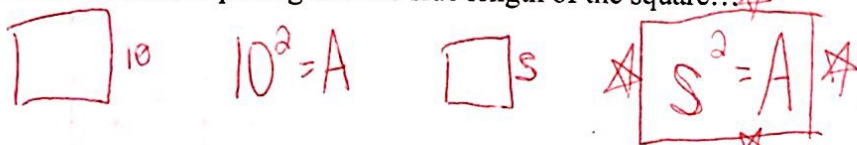
Directions: Complete the following sentences. Provide examples to support your statements.

6. A perfect square is created when...

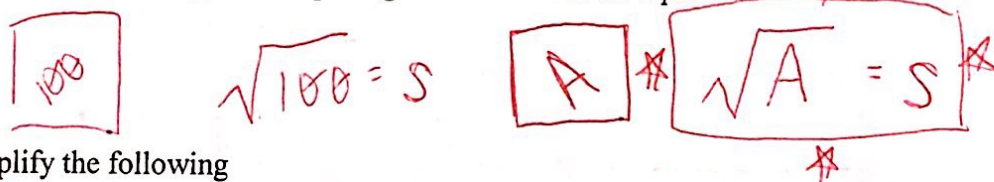
a whole # square

1^2 2^2 3^2 4^2 5^2 120^2
 7. To find the area of a square given the side length of the square...

~~3.5^2~~



8. To find the side length of a square given the area of the square...



9. Simplify the following

a. $\sqrt{36} = 6$

b. $\sqrt{121} = 11$

c. $\sqrt{16} = 4$

d. $\sqrt{1} = 1$

e. $\sqrt{100} = 10$

f. $\sqrt{49} = 7$

g. $\sqrt{625} = 25$

h. $\sqrt{2500} = 50$

i. $\sqrt{225} = 15$

$1^2 = 1$
 $2^2 = 4$
 $3^2 = 9$
 $4^2 = 16$

$5^2 = 25$
 $6^2 = 36$
 $7^2 = 49$
 $8^2 = 64$

$9^2 = 81$
 $10^2 = 100$
 $11^2 = 121$
 $12^2 = 144$

$13^2 = 169$
 $14^2 = 196$
 $15^2 = 225$