

# Special Right Triangle Investigation

Name \_\_\_\_\_ HR \_\_\_\_\_

1. List the perfect squares from 1 to 100.

2. Simplify each of the following radicals.

$\sqrt{18}$

$\sqrt{27}$

$\sqrt{8}$

$\sqrt{12}$

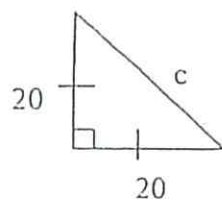
$\sqrt{50}$

$\sqrt{75}$

$\sqrt{72}$

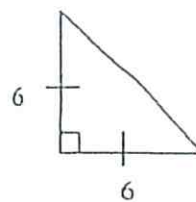
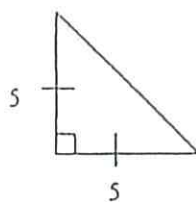
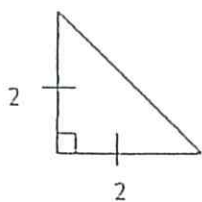
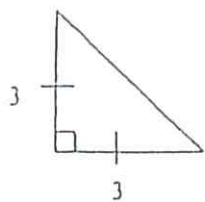
$\sqrt{108}$

45°-45°-90° Triangles are Isosceles Right Triangle with 2 legs of equal length.



$$20^2 + 20^2 = c^2$$

3. Use the Pythagorean Theorem to find the hypotenuse of the following triangles.



4. Did you find a pattern? Use the pattern to label the missing sides of the following 45°-45°-90° triangles.

