Geometry
Test Review - Special Right Triangles

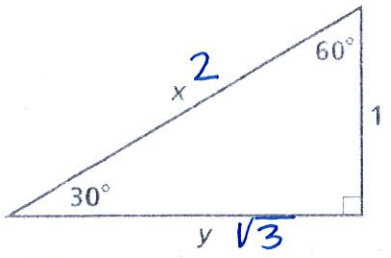
Name: Key
Date: _____

I. Special Right Triangles

Find the value of each variable. Leave your answers in simplest radical form.

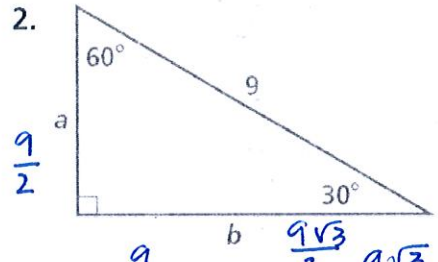
$\frac{25}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{25\sqrt{3}}{3}$

1.



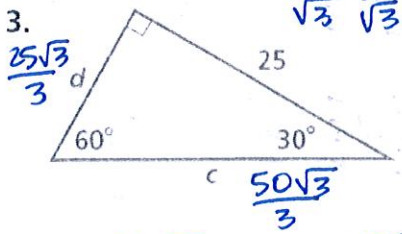
$x = 2$ $y = \sqrt{3}$

2.



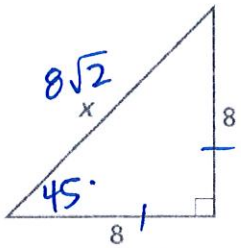
$a = \frac{9}{2}$ $b = \frac{9\sqrt{3}}{2}$

3.



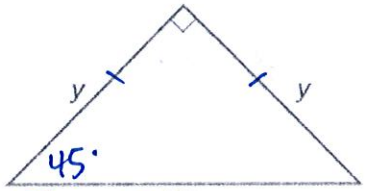
$c = \frac{50\sqrt{3}}{3}$ $d = \frac{25\sqrt{3}}{3}$

4.



$x = 8\sqrt{2}$

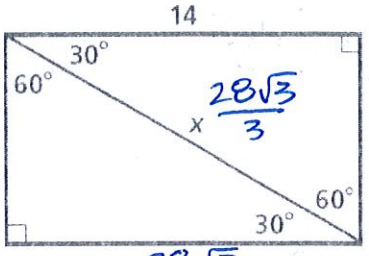
5.



$\frac{28}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{28\sqrt{2}}{2}$

$y = 14\sqrt{2}$

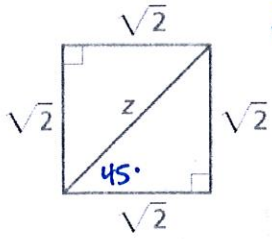
6.



$x = \frac{28\sqrt{3}}{3}$

$\frac{14}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{14\sqrt{3}}{3}$

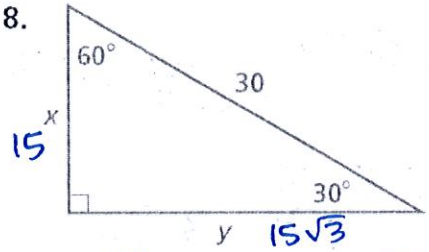
7.



$\sqrt{2} \cdot \sqrt{2} = \sqrt{4} = 2$

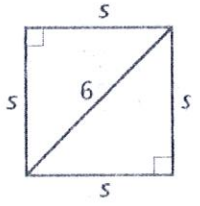
$z = 2$

8.



$x = 15$ $y = 15\sqrt{3}$

9.

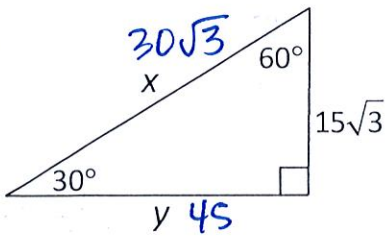


$\frac{6}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{6\sqrt{2}}{2} = 3\sqrt{2}$

$s = 3\sqrt{2}$

x = _____ y = _____ x = _____ x = _____ y = _____

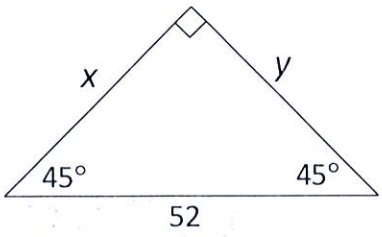
10.



$x = 30\sqrt{3}$ $y = 45$

$15\sqrt{3} \cdot \sqrt{3} = 15 \cdot 3 = 45$

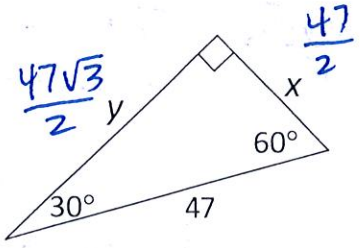
11.



$x = 26\sqrt{2}$ $y = 26\sqrt{2}$

$\frac{52}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{52\sqrt{2}}{2} = 26\sqrt{2}$

12.



$x = \frac{47}{2}$ $y = \frac{47\sqrt{3}}{2}$