Geometry Honors   Mathematician: _____

Unit 8: Similarity within Triangles   Period:_____
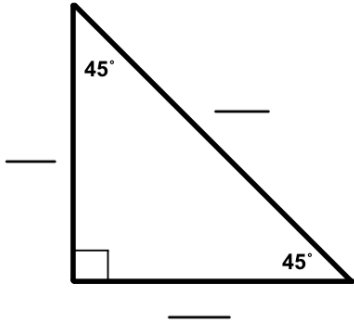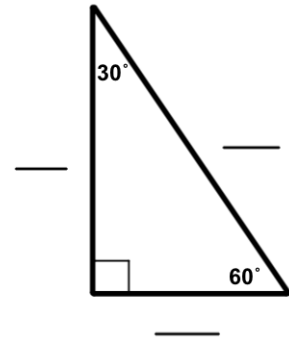
8.2b Special Right Triangles and Proportions

LEVEL: EMERGING

Directions: Find the lengths of the each of the sides of the 45-45-90° and 30-60-90° triangles in terms of x.
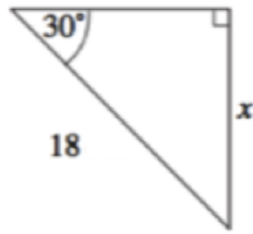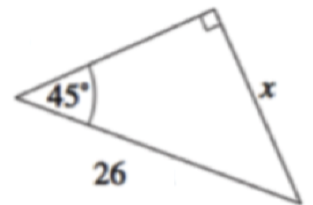
1) 45-45-90

2) 30-60-90

LEVEL: PROFICIENT

Directions: Find the exact length, unless otherwise noted, of the indicated side. Round approximate answers to two decimal places.
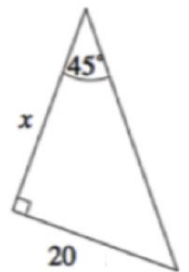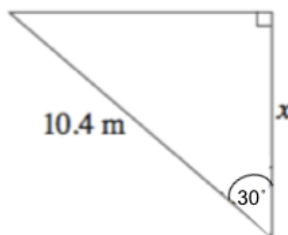
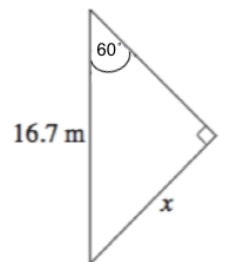3)

$x =$ _____

4)

$x =$ _____

5)

$x =$ _____

6)

$x =$ _____

7) Approximate value of x.
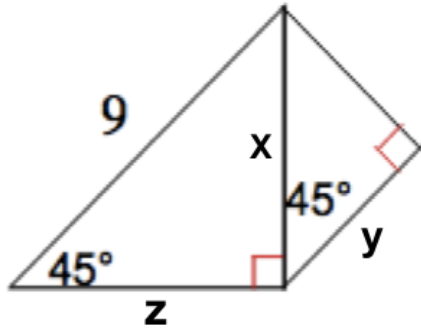

$x \approx$ _____

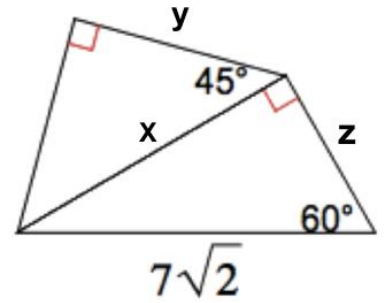8) Approximate value of x.

$x \approx$ _____

LEVEL: MASTERY

Directions: Find the exact length of the indicated sides. Then find their approximate sum. Round all sums to two decimal places.
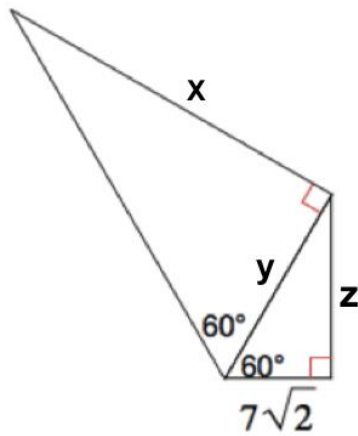
9)

$x =$ _____ $y =$ _____ $z =$ _____ SUM $\approx$ _____

10)

$x =$ _____ $y =$ _____ $z =$ _____ SUM $\approx$ _____

11)

$x =$ _____ $y =$ _____ $z =$ _____ SUM $\approx$ _____

12)

$x =$ _____ $y =$ _____ $z =$ _____ SUM $\approx$ _____