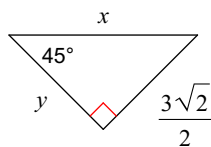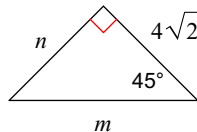## SM2-A HW #9-5 (solve 45-45-90 triangles)

Find the missing side lengths. Leave your answers as radicals in simplest form. You must provide your own 45-45-90 "reference triangle" (HINT: "one-one-two-root"). Solve either using the "scale factor method" or the "write a proportion method".
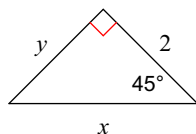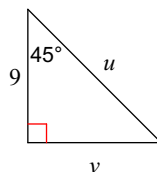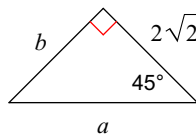
1)

x
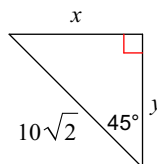$45°$
y
$\dfrac{3\sqrt{2}}{2}$

2)

n
$4\sqrt{2}$
$45°$
m

3)

y
2
$45°$
x

4)

$45°$
9
u
v

5)

b
$2\sqrt{2}$
$45°$
a

6)

x
y
$10\sqrt{2}$
$45°$

7)

y
x
5
$45°$

8)

9
$45°$
n
m

9)

$45°$
2
x
y

10)

b
a
$45°$
$5\sqrt{2}$
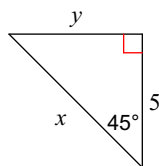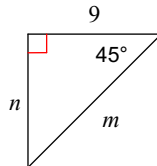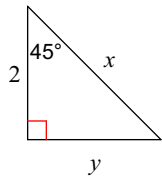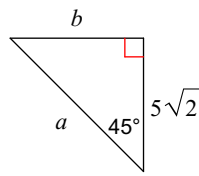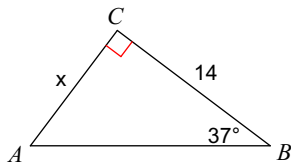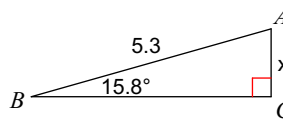
Find the measure of each side indicated. Round to the nearest tenth.

11)

C
x
14
$37°$
A
B

12)

A
5.3
x
$15.8°$
B
C

13)

C
x
$63°$
A
16
B

14)

C
7
$37°$
B
x
A