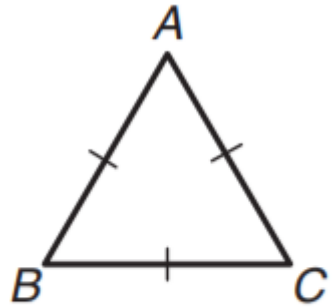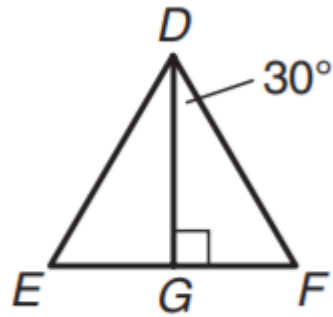Determine the measure of the indicated interior angle.

1)
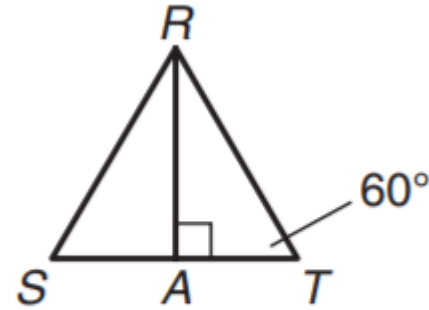
$m\angle ABC =$

2)
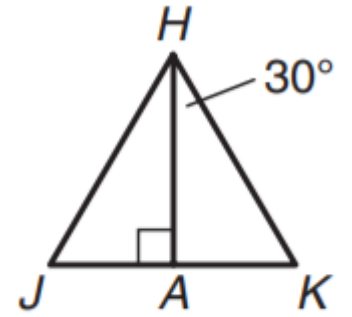
$m\angle DFE =$

3)

$m\angle TRA =$
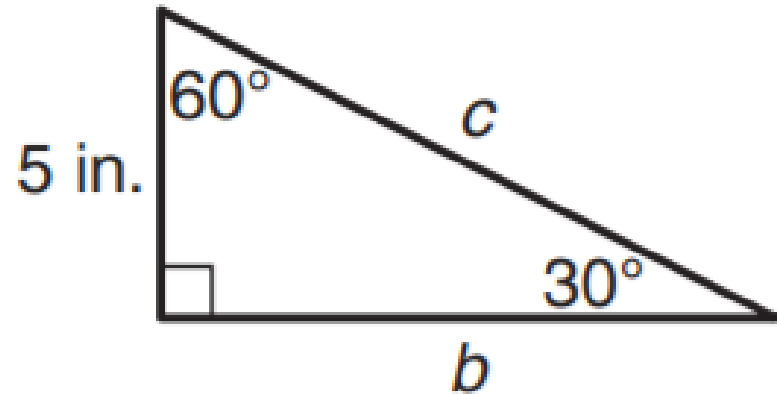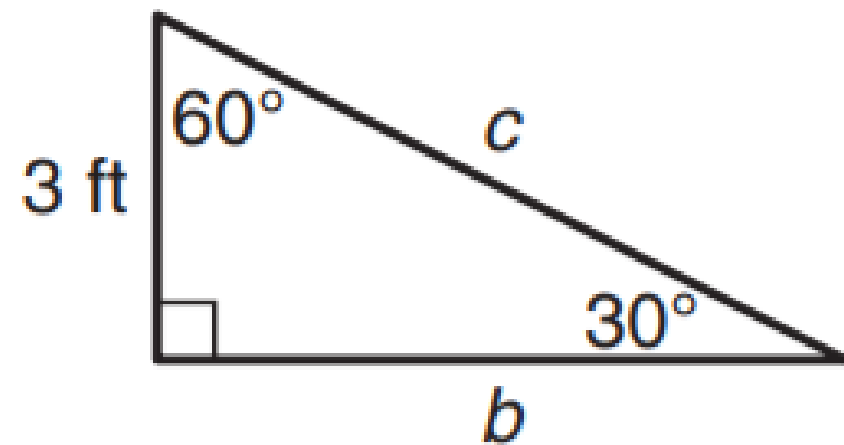
4)

$m\angle HAK =$

Given the length of the short leg of a 30°–60°–90° triangle, determine the lengths of the long leg and the hypotenuse. Write your answers as radicals in simplest form.
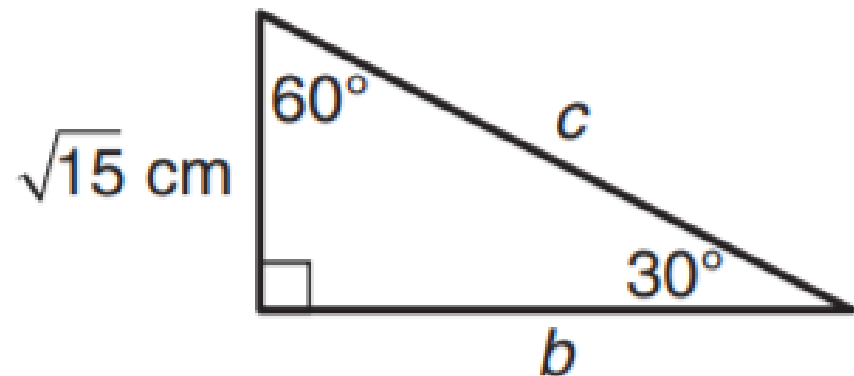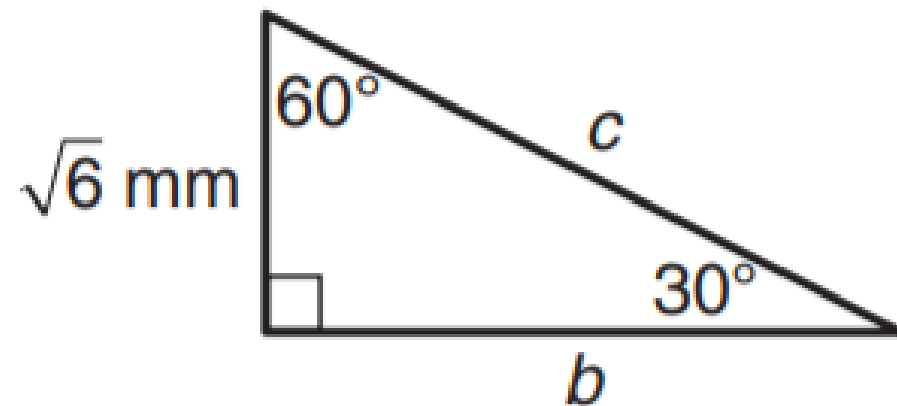
5)

60°
5 in.
c
30°
b

6)

60°
3 ft
c
30°
b

7)

60°
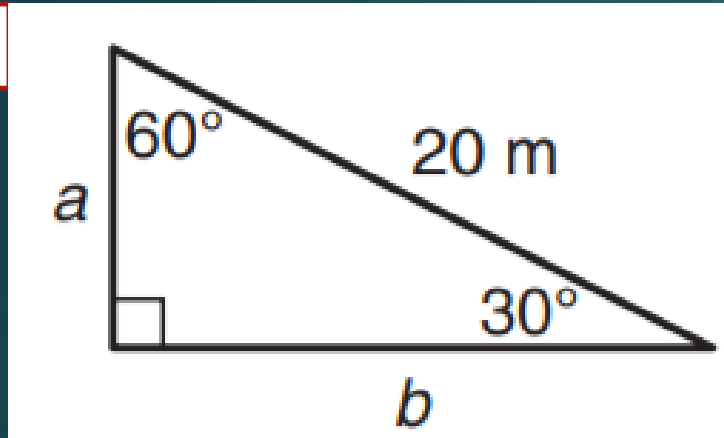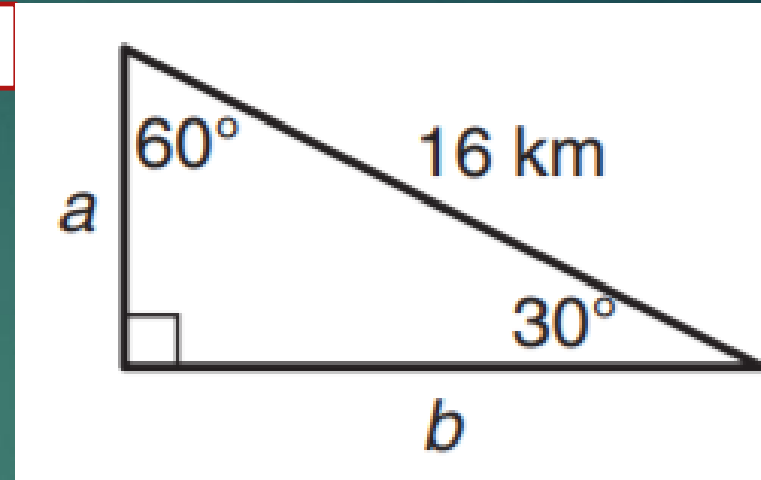$\sqrt{15}$ cm
c
30°
b

8)

60°
$\sqrt{6}$ mm
c
30°
b

Given the length of the hypotenuse of a 30°–60°–90° triangle, determine the lengths of the two legs. Write your answers as radicals in simplest form.
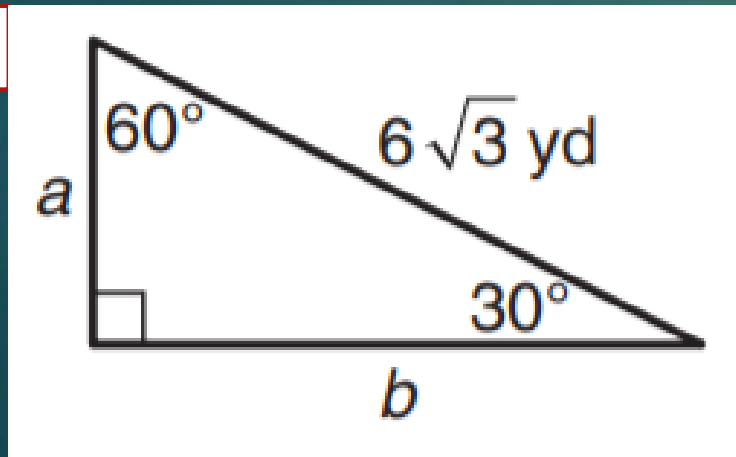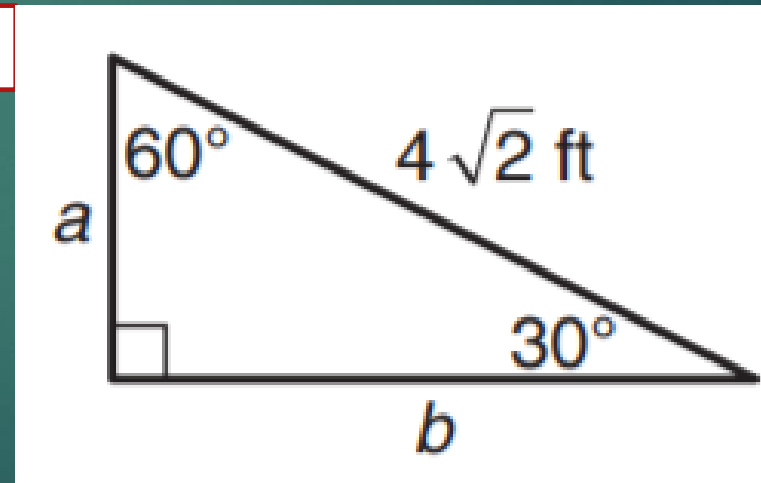
9)

60°   20 m
a
30°
b

10)

60°   16 km
a
30°
b

11)
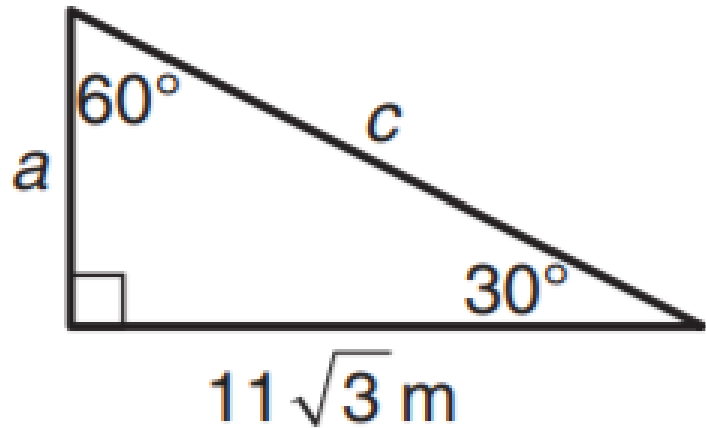
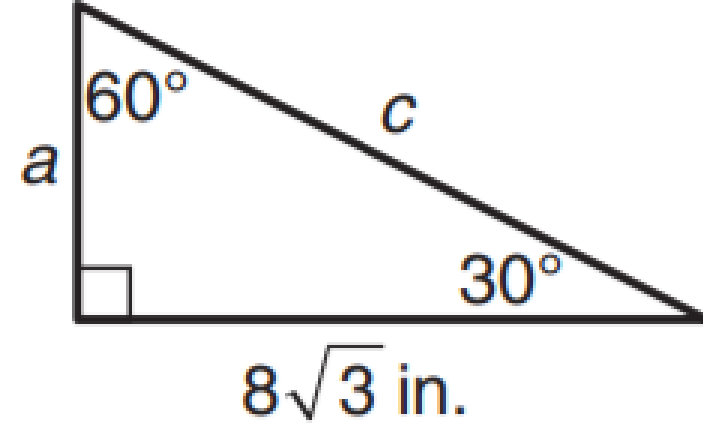60° $6\sqrt{3}$ yd
a
30°
b

12)

60° $4\sqrt{2}$ ft
a
30°
b

Given the length of the long side of a 30°–60°–90° triangle, determine the lengths of the short leg and the hypotenuse. Write your answers as radicals in simplest form.
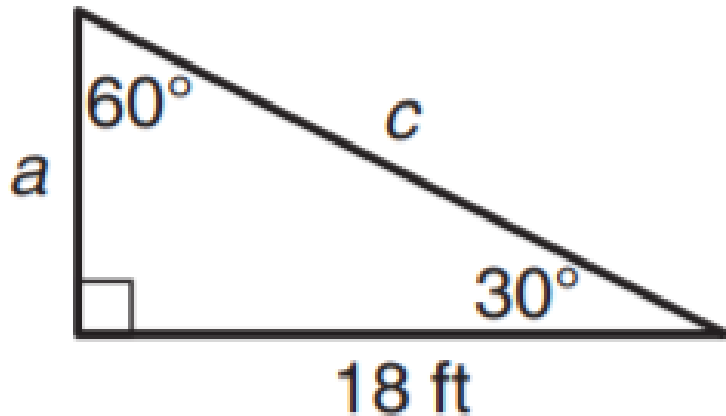
13)

a 60° c 30° $11\sqrt{3}$ m

14)

a 60° c 30° $8\sqrt{3}$ in.

15)

a 60° c 30° 18 ft

16)

a 60° c 30° 12 mi