[In the following problems, the hypotenuse, c, is given.

Solve each triangle.]

(1.) 30 - 60 - 90 ; c = 8 here is the problem

a = 4 ; b = 4√3

(2.) 45 - 45 - 90; c = 4 here is the problem

a = 4/√2 b = 4/√2

a = 4√2/2 b = 4√2/2 multiply by √2/√2

a = 2√2 ; b = 2√2 reduce

(3.) 45 - 45 - 90; c = 11√2 here is the problem

a = 11 ; b = 11

(4.) 30 - 60 - 90; c = 8√3 here is the problem

a = 4√3 b = 12

(5.) 45 - 45 - 90 ; c = 19

a = 19/√2 b = 19/√2

a = 19√2/2 b = 19√2/2

(6.) 30 - 60 - 90; c = 15

a = 7.5 b = 7.5√3

[In the following problems, evaluate each function.]

(16.) cos 405

= cos (405 - 360) subtract 360

= cos 45 subtract

= √2/2

(17.) sin 570

= sin (570 - 360)

= sin 210 subtract

= -1/2

(18.) tan 420

= tan (420 - 360)

= tan 60

= √3

(19.) sin 330

= sin -30

= -1/2

(20.) tan 405

= tan 45

= 1

(21.) cos 660

= cos 300

= 1/2

(22.) tan 585

= tan (585 - 360)

= tan 225

= 1

(23.) tan 870

= tan (870 - 720)

= tan 150

= -1/√3

= -√3/3

(24.) cos 495

= cos (495 - 360)

= cos 135

= -√2/2

(25.) sin 780

= sin 60

= √3/2