

Using the triangle to the right solve for the following:

1)

<Q = 42o

p = 24

r = ?

2)

<Q = 42o

p = 24

q = ?

3)

<P = 68o

q = 54

r = ?



4)

<Q = 30o

p = 40

r = ?

5)

<P = 53o

p = 23

q = ?

6)

<Q = 20o

p = 110

q = ?

Given the following triangle and formula for the law of sines: $\frac{a}{\sin(A)}= \frac{b}{\sin(B)}= \frac{c}{\sin(C)}$

Solve for the following as directed:

7)

<A = 50o

<C =115o

c = 22

a = ?

8)

<A = 50o

<C =115o

c = 22

Solve the triangle:



9)

<A = 35o

<C =95o

a = 22

Solve the triangle:

10)

<A = 75o

<C =75o

b = 25

Solve the triangle:



11)

<A = 55o

a =15

b = 35

Solve the triangle:

12)

<C = 45o

a =14

c = 36

Solve the triangle:

Use the unit Circle axis to sketch a graph of x and find the reference triangle:

13) *x = 45o*

Find:

sinx =

cosx =

 tanx =



14) *x = 120o*

Find:

sinx =

cosx =

 tanx =



15) *x =* ***-****60o*

Find:

sinx =

cosx =

 tanx =



16) *x = 240o*

Find:

sinx =

cosx =

 tanx =



17) *x = 315o*

Find:

sinx =

cosx =

 tanx =



18) *x =* ***-****120o*

Find:

sinx =

cosx =

 tanx =



19) *x = 930o*

Find:

sinx =

cosx =

 tanx =



20) *x =* ***-****510o*

Find:

sinx =

cosx =

 tanx =

**Bonus:**

Find the value of the following:

21) $cos⁡\left(sec^{-1} \frac{3}{5}\right)$ 22) $csc⁡\left(sin^{-1} \frac{3}{5}\right)$ 23) $cos⁡\left(sin^{-1} \frac{3}{5}\right)$



Find the Area of the following triangles:

24) <A = 28o

 b = 14 $Area= \frac{1}{2}\left(s\_{1}\right)\left(s\_{2}\right)sin(<\_{3})$

 c = 9

25) <A = 54o

 <C = 65o

 a = 19.2

Use the Law of Cosine to solve for each triangle: $a^{2}=b^{2}+c^{2}-2bccosA$

26) <C = 120o

 a = 9

 b = 5