x = 180-90-y = 90-y

Y = maxHeightY

y = tossAngle 90

X

Law of Sines

sin(a)/A = sin(b)/B = sin(c)/C

solve for X

sin(x)/X = sin(y)/Y

=Ysin(x) = Xsin(y)

=(Ysin(x))/sin(y) = X

=(maxHeightY\*sin(90-tossAngle))/sin(tossAngle)=X

=sin(90-tossAngle)/X = sin(tossAngle)/maxHeightY

=maxHeightY\*sin(90-tossAngle) = Xsin(tossAngle)

=(maxHeightY\*sin(90-tossAngle))/sin(tossAngle) = X

=(maxHeightY\*sin(90-tossAngle))/sin(tossAngle)=X

x = 180-90-y = 90-y

Y = maxHeightY



y = tossAngle 90

X

The equation becomes:

((maxHeight – 180) \* sin(90-tossAngle))/sin(tossAngle)=X