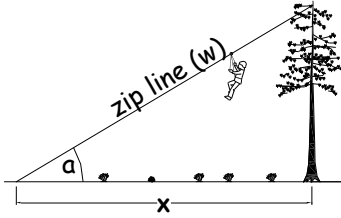


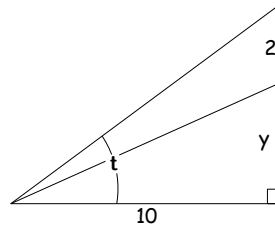
Perform your work on separate paper as necessary and attach it. Write your answers on this page. Answers must be boxed or circled and clearly legible. Where possible write answers as an exact integer or fraction otherwise use two decimal accuracy. Leave π in answers where applicable. Units required. 10 pts BONUS (optional assignment)

- 1) Find the zip line length as a function of a and x .



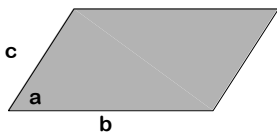
$w(a,x) =$ _____

- 2) Find y as a function of t .



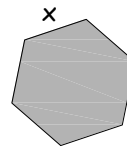
$y(t) =$ _____

- 3) Find the area as a function of a , b and c .



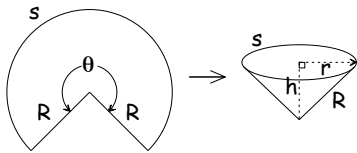
$A(a,b,c) =$ _____

- 4) Find the area of a regular hexagon as a function of x .



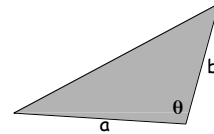
$A(x) =$ _____

- 5) Find the volume of the Dixie cup as a function of R & θ .



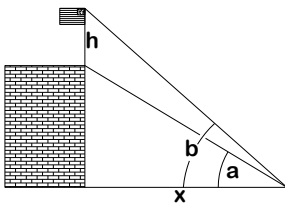
$y(R,\theta) =$ _____

- 6) Find the area as a function of a , b and θ .



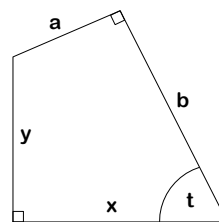
$A(a,b,\theta) =$ _____

- 7) Find h as a function of a , b and x .



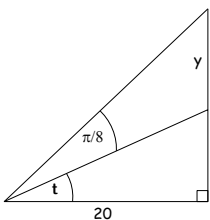
$h(a,b,x) =$ _____

- 8) Find x as a function of a , b and t .



$x(a,b,t) =$ _____

- 9) Find y as a function of t .



$y(t) =$ _____

- 10) From sea level, two angular measurements (θ_1 and θ_2) are taken along the same bearing toward the top of a mountain. The distance between the angular measurements (x) is also known. Find y as function of θ_1 , θ_2 , and x

$y(\theta_1, \theta_2, x) =$ _____

