Variables:

val circle = "1"  
val triangle = "2"  
val square = "3"  
val parallelogram = "4"

var option = println("Please enter a number from the list of a shape you would like to find the area of: ").toString()

var r: Int = Integer.valueOf(readLine())

var b: Int = Integer.valueOf(readLine())

var h: Int = Integer.valueOf(readLine())

var h: Int = Integer.valueOf(readLine())

var w: Int = Integer.valueOf(readLine())

var b: Int = Integer.valueOf(readLine())

var h: Int = Integer.valueOf(readLine())

var area = h.times(w)

var ans = readLine()

var area = .5.times(b \* h)

var area = PI \* r

var area = b.times(h)

Process:

fun square(h: Int, w: Int){  
 var area = h.times(w)  
 println("The area of your square is $area")  
 println("Would you like to find the area of another shape? (y/n): ")  
 var ans = readLine()  
 if (ans == "y"){  
 main()  
 }else{  
 println("Thank you, goodbye!")  
 }  
}  
  
fun triangle(b: Int, h: Int){  
 var area = .5.times(b \* h)  
 println("The area of your triangle is $area")  
 println("Would you like to find the area of another shape? (y/n): ")  
 var ans = readLine()  
 if (ans == "y"){  
 main()  
 }else{  
 println("Thank you, goodbye!")  
 }  
}  
  
fun circle(r: Int){  
 var area = PI \* r  
 println("The area of your circle is $area")  
 println("Would you like to find the area of another shape? (y/n): ")  
 var ans = readLine()  
 if (ans == "y"){  
 main()  
 }else{  
 println("Thank you, goodbye!")  
 }  
}  
  
fun parallelogram(b: Int, h: Int){  
 var area = b.times(h)  
 println("The area of your parallelogram is $area")  
 println("Would you like to find the area of another shape? (y/n): ")  
 var ans = readLine()  
 if (ans == "y"){  
 main()  
 }else{  
 println("Thank you, goodbye!")  
 }  
}  
  
fun main(){  
 val circle = "1"  
 val triangle = "2"  
 val square = "3"  
 val parallelogram = "4"  
 println("1. Circle")  
 println("2. Triangle")  
 println("3. Square")  
 println("4. Parallelogram")  
 var option = println("Please enter a number from the list of a shape you would like to find the area of: ").toString()  
 option = readLine().toString()  
 if (option == circle){  
 println("Enter the radius of your circle: ")  
 var r: Int = Integer.valueOf(readLine())  
 circle(r)  
 }else if (option == triangle){  
 println("Enter the base of the square: ")  
 var b: Int = Integer.valueOf(readLine())  
 println("Enter the height of the square: ")  
 var h: Int = Integer.valueOf(readLine())  
 triangle(b, h)  
 }else if (option == square){  
 println("Enter the height of the square: ")  
 var h: Int = Integer.valueOf(readLine())  
 println("Enter the width of the square: ")  
 var w: Int = Integer.valueOf(readLine())  
 square(h, w)  
 }else{  
 println("Enter the base of the square: ")  
 var b: Int = Integer.valueOf(readLine())  
 println("Enter the height of the square: ")  
 var h: Int = Integer.valueOf(readLine())  
 parallelogram(b, h)  
 }  
  
}