

Pseudocode – Practice

1. Make a program that will calculate the area of a rectangle.
 - a. Ask the user for input (width and length)
 - b. Check if both width and length are more than 0,
if they are less than 0 ask again,
if they are more than 0 then continue
 - c. Calculate the area
 - d. Show the area to the user

width

$$\text{Area} = l \cdot w$$

length

SOLUTION:

```
PROGRAM rectangleArea:
START
    define L, W, area
    L = input ("What is the length of rectangle?")
    W = input ("What is the width of rectangle?")

    IF (L > 0 and W > 0) THEN
        Calculate the area of rectangle
        area = W * L
        print ("Area of rectangle is," + area)
    ELSE
        print ("Length or width is less than 0, try again!")
    ENDIF
END
```

OR

SOLUTION:

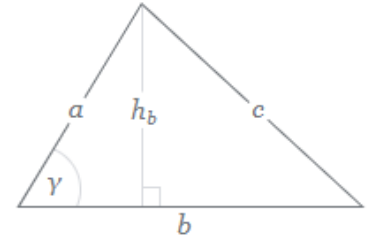
```
PROGRAM rectangleArea:
START
    define L, W, area
    L = input ("What is the length of rectangle?")
    W = input ("What is the width of rectangle?")

    IF (L < 0 and W < 0) THEN
        print ("Length or width is less than 0, try again!")
    ELSE
        Calculate the area of rectangle
        area = W * L
        print ("Area of rectangle is," + area)
    ENDIF
END
```

2. Make a program that will calculate the area of a triangle.

- a. Ask the user for input (base and height)
- b. Check if both base and height are more than 0,
if they are less than 0 ask again,
if they are more than 0 then continue
- c. Calculate the area
- d. Show the area to the user

$$A = \frac{h_b b}{2}$$



SOLUTION:

```
PROGRAM triangleArea:
START
    define B, H, area
    B = input ("What is the base of triangle?")
    H = input ("What is the height of triangle?")

    IF (B > 0 and H > 0) THEN
        Calculate the area of triangle
        area = 1/2 * B * H
        print ("Area of triangle is," + area)
    ELSE
        print ("Base or height is less than 0, try again!")
    ENDIF
END
```

OR

SOLUTION:

```
PROGRAM triangleArea:
START
    define B, H, area
    B = input ("What is the base of triangle?")
    H = input ("What is the height of triangle?")

    IF (B < 0 and H < 0) THEN
        print ("Base or height is less than 0, try again!")
    ELSE
        Calculate the area of triangle
        area = 1/2 * B * H
        print ("Area of triangle is," + area)
    ENDIF
END
```

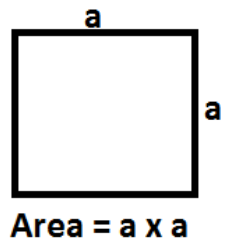
3. Make a program that will calculate the area of a square.

a. Ask the user for input (side)

b. Check if side is more than 0,

if they are less than 0 ask again,

if they are more than 0 then calculate the area and show the area to the user



SOLUTION:

```
PROGRAM squareArea:
START
    define a, area
    a = input ("What is the side of the square?")

    IF(a > 0) THEN
        Calculate the area of square
        area = a * a
        print ("Area of square is," + area)
    ELSE
        print ("Side is less than 0, try again!")
    ENDIF
END
```

OR

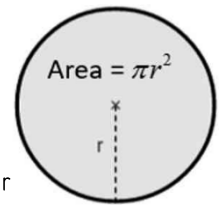
SOLUTION:

```
PROGRAM squareArea:
START
    define a, area
    a = input ("What is the side of the square?")

    IF (a < 0) THEN
        print ("Side is less than 0, try again!")
    ELSE
        Calculate the area of square
        area = a * a
        print ("Area of square is," + area)
    ENDIF
END
```

4. Make a program that will calculate the area of a circle.

- a. Ask the user for input (radius)
- b. Check if radius is more than 0,
if they are less than 0 ask again,
if they are more than 0 then calculate the area and show the area to the user



SOLUTION:

```
PROGRAM circleArea:
START
    define r, area
    r = input ("What is the radius of the circle?")

    IF (r > 0) THEN
        Calculate the area of circle
        area = 3.14 * r * r
        print ("Area of circle is," + area)
    ELSE
        print ("Radius is less than 0, try again!")
    ENDIF
END
```

OR

SOLUTION:

```
PROGRAM circleArea:
START
    define r, area
    r = input ("What is the side of the circle?")

    IF (r < 0) THEN
        print ("Radius is less than 0, try again!")
    ELSE
        Calculate the area of circle
        area = 3.14 * r * r
        print ("Area of circle is," + area)
    ENDIF
END
```