Name_____ Date_____

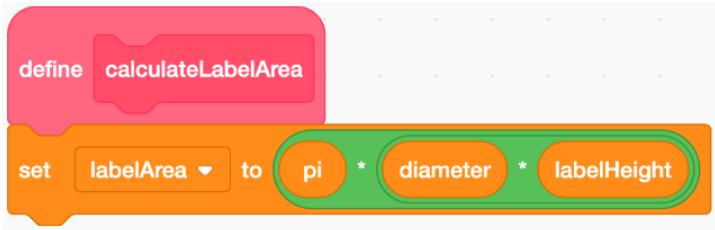
Shape and Space
Unit 1 Line Master 10f

Answers

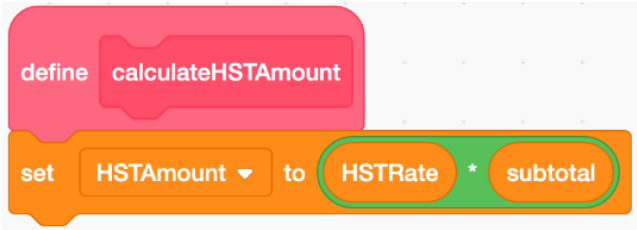
1. The user is asked to enter the diameter of the container, the label height, and the number of labels they want printed.
2. Once completed, the application will calculate and display the design cost, printing cost, subtotal, tax, and total.
3. a) The cost per square centimetre to design a label; $1.50 per square centimetre

   b) The cost per label to print the labels; $0.002, or 0.2¢ per label.

4. a)



   b)



5. a)
```
subprogram calculateSubtotal
    subtotal = DesignCost + PrintCost
```

   b)
```
subprogram calculateTotal
    Total = subtotal + HSTAmount
```

Name_____ Date_____

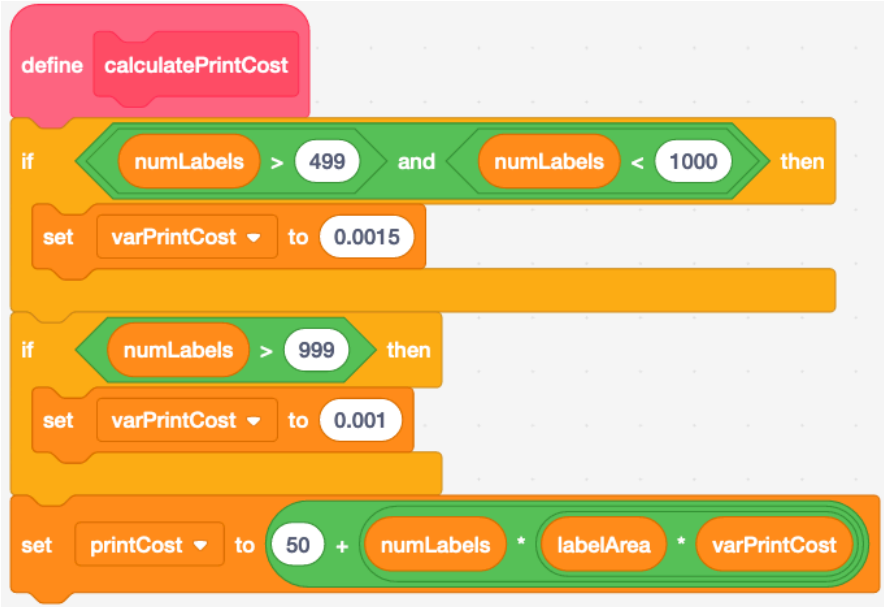
Shape and Space
Unit 1 Line Master 10g

Answers (cont'd)

Extensions:

Sample answers:

- I decided to make the rate per label $0.0015 (0.15¢) for orders between 500 and 999 labels and $0.001 (0.1¢) for orders of 1000 or more labels. This is how I changed the subprogram that calculates the print cost:



- I added a block to the end of each of the subtotal and HST amount subprograms.
  One new block multiplies the subtotal variable by 100, rounds it, then divides by 100.
  One new block multiplies the HSTAmount variable by 100, rounds it, then divides by 100.
  Because the total is calculated by adding these two variables, it will also be calculated to 2 decimal places.

Name_____ Date_____

Shape and Space
Unit 1 Line Master 10h

Answers (cont'd)

The subprograms look like this: