

TIPP&SEE**The Frog and The Fly**

Scratch Link: The Frog and The Fly (<https://scratch.mit.edu/projects/216652633>)

Start with **TIPP&SEE!**

Get a **TIPP** from the Project Page.

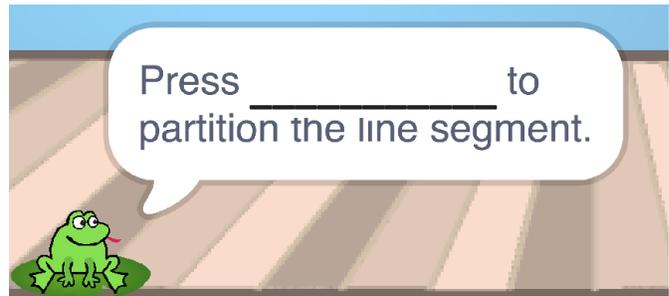
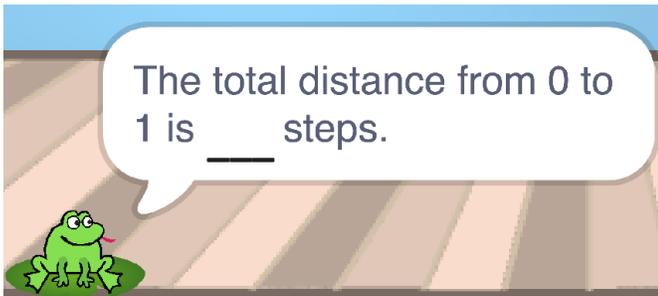
Read carefully: **Title**

Instructions

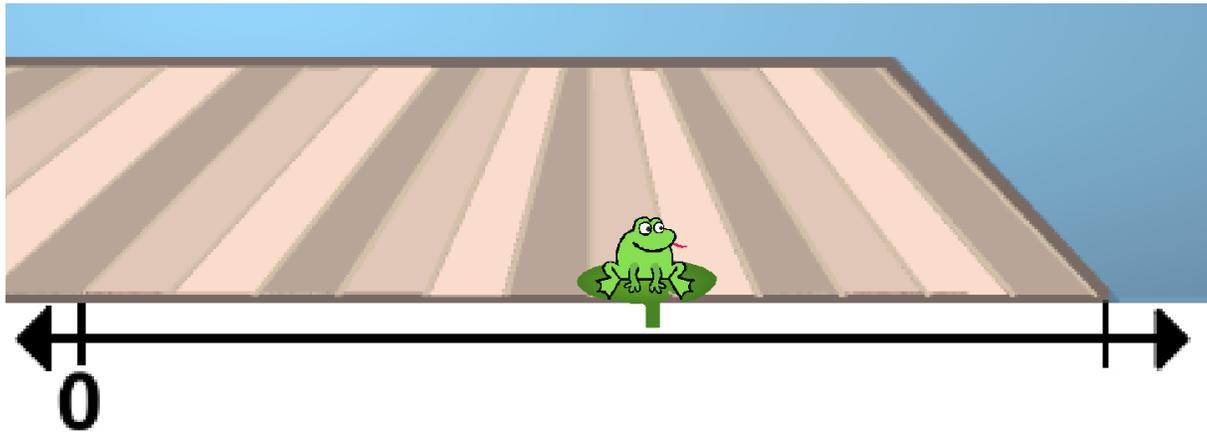
Purpose

Play the project and answer the questions below.

- ① Fill in the blanks from when you clicked :



- ② Draw the tick marks and label the number line after you pressed the space key:



- ③ Are the spaces between the tick marks too big? or too small? **too big** **too small**

TIPP&SEE**The Frog and The Fly (con't)**

SEE Inside. Make changes, play, and observe closely to understand the code.

- ④ Explore: Click on the  Sprite, and make these changes.



- Change  to . Run and watch.
- Change  to . Run and watch.
- Remove . Run and watch. Then put  back in.
- Change  to . Run and watch.
- Remove . Run and watch. Then put  back in.

- ⑤ Explore: Circle your answer.

- a. This block makes the Tickmark sprite move to the next spot to draw a tick mark:



- b. This block sets how many tick marks to draw:



- c. This block controls the speed of the drawing:



- d. This block draws the tick mark each time:



- e. This block will space the tick marks farther apart:

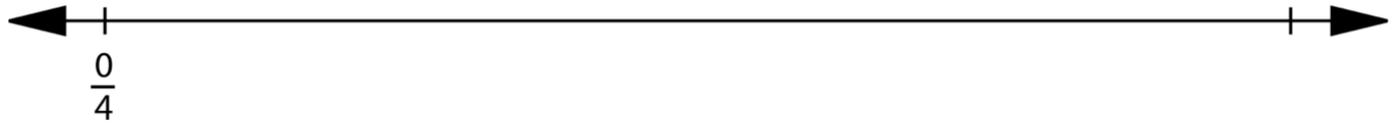


The Frog and The Fly

NAME _____		
Lesson 7-8A		
SCRATCH ID _____	DATE _____	TIME _____

Carefully read the directions for each problem. Do Problems 1 to 4 without the computers.

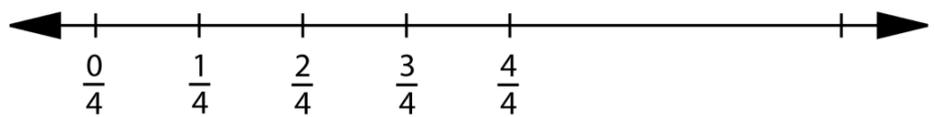
- ① Draw tick marks to partition the line segment below into fourths. Label each fraction tick mark.



- ② We want the program to partition the line segment into fourths. The line segment below is 360 steps long. When the code below runs, it gives this output:

```

repeat (4)
  move (50) steps
  Stamp Tick
  wait (1) seconds
  
```



Are the spaces between the tick marks too big or too small?

too big **too small**

- ③ For Problem 2, `move 50 steps` sets how far apart the tick marks are.

Does the number in `move 50 steps` need to be bigger or smaller?

bigger **smaller**

- ④ Estimate what you think the numbers should be for fourths. Write them in the script on the right.

```

repeat ( )
  move ( ) steps
  Stamp Tick
  wait (1) seconds
  
```

- ⑤ Check your estimates for Problem 4. If those numbers do not partition the line into four equal parts, then adjust, observe, and test until the output is four equal parts. Write those numbers in the script at the right.

```

repeat ( )
  move ( ) steps
  Stamp Tick
  wait (1) seconds
  
```

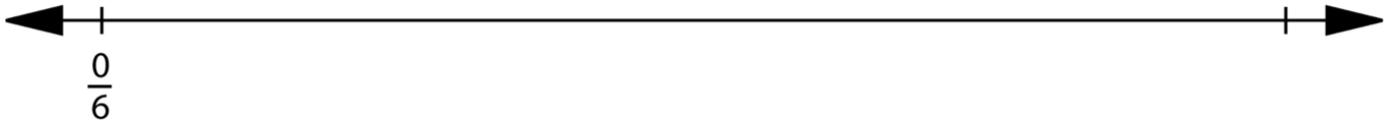
The Frog and The Fly (continued)

NAME _____

Lesson 7-8A 

SCRATCH ID _____ DATE _____ TIME _____

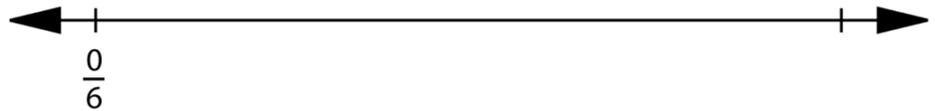
⑥ Draw tick marks to partition the line segment below into sixths. Label each fraction tick mark.



⑦ The output from the blocks below should place six tick marks and partition the line into six equal parts. Enter the arguments into your Scratch project and draw the output below.

```

repeat (6)
  move (75) steps
  Stamp Tick
  wait (1) seconds
  
```



Are the spaces between the tick marks too big or too small?

too big **too small**

Does the number in  need to be bigger or smaller?

bigger **smaller**

⑧ Estimate what you think the numbers should be for sixths. Write them in the script on the right.

```

repeat ( )
  move ( ) steps
  Stamp Tick
  wait (1) seconds
  
```

⑨ Now try your program. Test, observe, modify, repeat until it is correct. Write your correct code on the right.

```

repeat ( )
  move ( ) steps
  Stamp Tick
  wait (1) seconds
  
```

⑩ What other programs can you write to partition the number line?

```

repeat ( )
  move ( ) steps
  Stamp Tick
  
```

```

repeat ( )
  move ( ) steps
  Stamp Tick
  
```

```

repeat ( )
  move ( ) steps
  Stamp Tick
  
```

```

repeat ( )
  move ( ) steps
  Stamp Tick
  
```