TIPP&SEE
Getting Mack Home

Objective: I can use the repeat block when I know the distance to the intended location.
Scratch Link: Getting Mack Home (https://scratch.mit.edu/projects/210105463/)

Start with **TIPP&SEE!**   Get a **TIPP** from the Project Page.

Read carefully: **T**itle   **I**nstructions   **P**urpose

Play the project and circle or write down the action(s) that happened for each question below.

① When I clicked 🚩 , the number line was divided into:

halves   thirds   fourths   fifths   sixths   sevenths   eighths   ninths   tenths

② The puddle was located at:

$\dfrac{3}{8}$ $\dfrac{5}{6}$ $\dfrac{5}{8}$ $\dfrac{1}{2}$ $\dfrac{3}{4}$

④ What did the dog Mack do? _____

_____

⑤ How much further should Mack walk to get home?

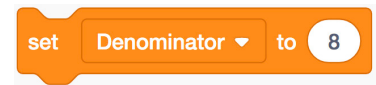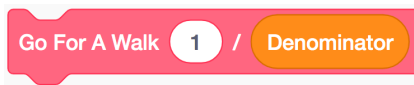$\dfrac{3}{8}$ $\dfrac{5}{6}$ $\dfrac{5}{8}$ $\dfrac{1}{2}$ $\dfrac{3}{4}$

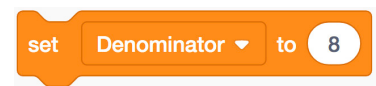⑥ Write a fraction number sentence for this problem. _____
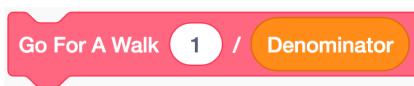
SEE Inside. First click on the Mack **S**prite, then find the | when 🚩 clicked | **E**vent.

⑦ **E**xplore: Circle your answers.

a. This block determines how many equal parts the line gets divided into:

`repeat 5`   `Go For A Walk 1 / Denominator`   `set Denominator to 8`

b. This block makes Mack walk forward one tick mark:

`repeat 5`   `Go For A Walk 1 / Denominator`   `set Denominator to 8`

c. This block determines how many tick marks Mack walks:

`repeat 5`   `Go For A Walk 1 / Denominator`   `set Denominator to 8`
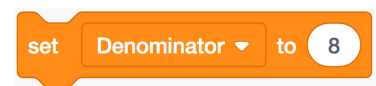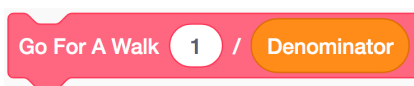
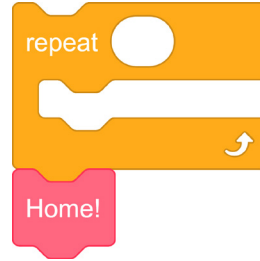# TIPP&SEE
Getting Mack Home (con't)

Explore: Help Mack get home!

⑧ Find these blocks and add them to the starting script:

repeat

Home!

⑨ Make changes to the script so that Mack walks home after stepping in the puddle. Think:

a. *What step (block) does Mack have to repeat a few more times to get home?*
   Where in my script should I put that block?

b. *How many times does Mack have to repeat that step (block) to get home?*
   Where in my script can I enter that number?

Shuffle Puddle

Objective: I can use the repeat until block.
Scratch Link: Getting Mack Home (https://scratch.mit.edu/projects/210105463/)
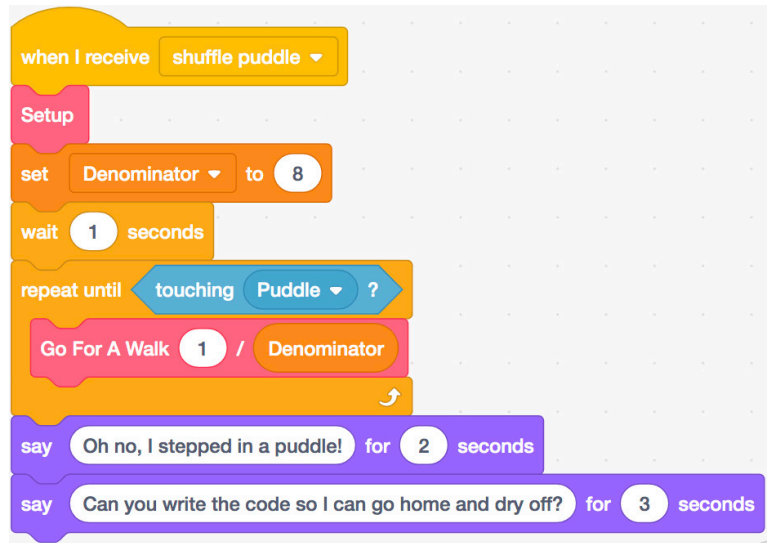
Press the Shuffle Puddle button and observe the project run again. (Do this at least twice.)

① How does the project run differently from when you pressed the green flag? _____

_____

SEE Inside. Click on the Mack sprite, then find the **when I receive shuffle puddle** event.

Look at the first part of this script.

Then answer the questions below.

```
when I receive  shuffle puddle ▼

Setup

set  Denominator ▼  to  8

wait  1  seconds

repeat until  touching  Puddle ▼  ?
    Go For A Walk  1  /  Denominator

say  Oh no, I stepped in a puddle!  for  2  seconds

say  Can you write the code so I can go home and dry off?  for  3  seconds
```
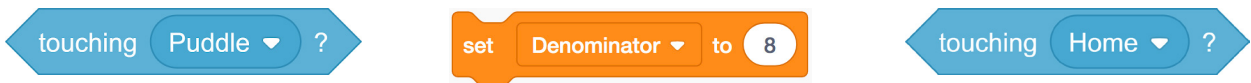
② Where does Mack stop walking? _____

③ What causes Mack to stop walking? _____

Now think about how to help Mack walk the rest of the way home.

④ When do you want Mack to stop walking during the second part of his walk?

_____

⑤ Which block do you think you could use to tell Mack when to stop?

```
touching  Puddle ▼  ?          set  Denominator ▼  to  8          touching  Home ▼  ?
```

⑥ Which repeat block can you use with the block you circled in Problem 5?

```
repeat  ( )              repeat until  ◆
```
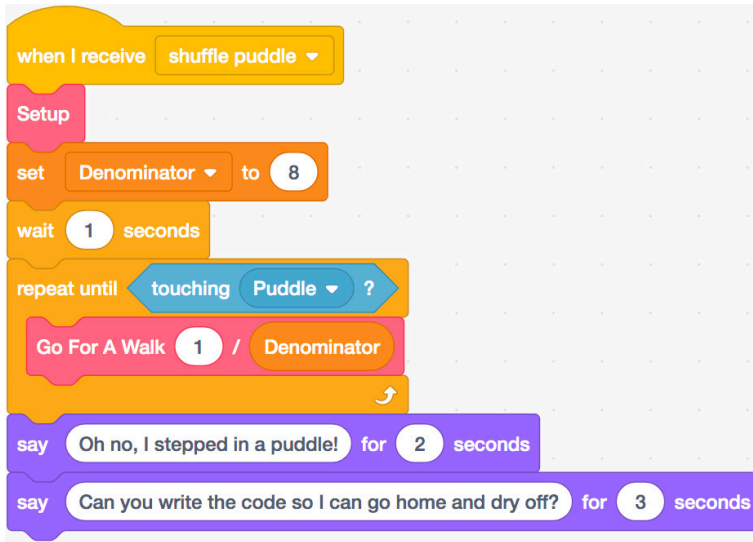
Shuffle Puddle (con't)

⑦ Add to the script to help Mack walk home.

Then press the **Shuffle Puddle** button to test your script.

When your script is finished and working, remix, share, and draw your additions to the starting script below.