Lesson 2.7: Assessment Exercises

Objectives

After completing this lesson, students will:

- Gain an understanding of how much they learned and understood during Unit 2

Agenda

1. Student Activity	30 mins
2. Class Discussion: Review Student Activity Answers	20 mins

Preparation

- ❑ Print student activity worksheet (one per student)

Resources & Links

- ❑ None

1. Student Activity: Assessment Puzzles

Distribute one worksheet per student. This is an assessment activity for material covered in Unit 2. Explain the activity to students. Leave enough time at the end to go over the answers.

2. Class Discussion: Review Student Activity Answers

Engage students in an interactive discussion and review of the answers to each of the exercises.

Solution to Student Activity:

1. Check everything that is true about a regular polygon
   ✅Regular polygons have straight lines
   ✅Polygons are 2-dimensional (2D) shapes

2. a) When the ***t*** key on the keyboard is pressed, what does the code draw?

   Triangle

   b) A user pressing the letter ***t on a keyboard*** to cause the program to draw something is an example of a program that responds to ***user input***.

   ✅ True

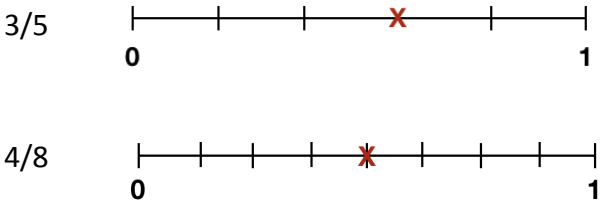
3. What does it draw when:

   a) The variable ***sides*** is set to 4:
   Square

   b) The variable ***sides*** is set to 6:
   Hexagon

4. What are some good reasons to use a loop in a program instead of repeating the same sequence of instructions? Check all reasons you think are valid.
   ✅The program is shorter
   ✅ If you need to change one command, you only have to do it once
   ✅The code is easier to read

5. Represent the following fractions on a number line by first dividing the line into equal fraction parts (by drawing a line) and then an x at the correct location on the number line.



6. A sequence of actions means that instructions are in a certain order.

   ✅ True

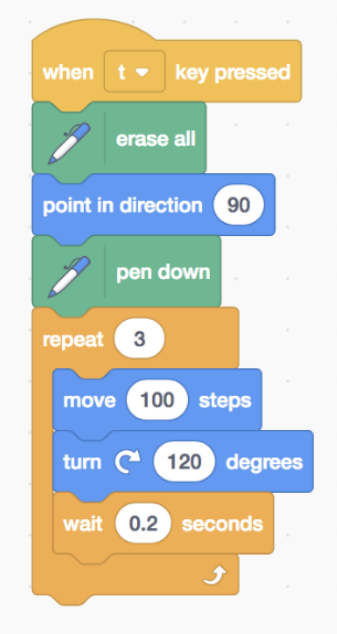
7. The following block is missing:

Student Activity: Check Your Knowledge

1. Check everything that is true about a regular polygon:

   - ❑ Regular polygons have straight lines
   - ❑ Every polygon has 4 sides
   - ❑ Polygons are 2-dimensional (2D) shapes
   - ❑ Regular polygons have curved lines
   - ❑ Polygons are typically oval shaped

2. Given the Scratch code below, let's see what you know about it!



a) When the ***t*** key on the keyboard is pressed, what does the code draw?

_____

b) A user pressing the letter ***t on a keyboard*** to cause the program to draw something is an example of a program that responds to ***user input***.

- ❑ True
- ❑ False

3. Inspect the following script.

What does it draw when:

a) The variable **sides** is set to 4:

_____

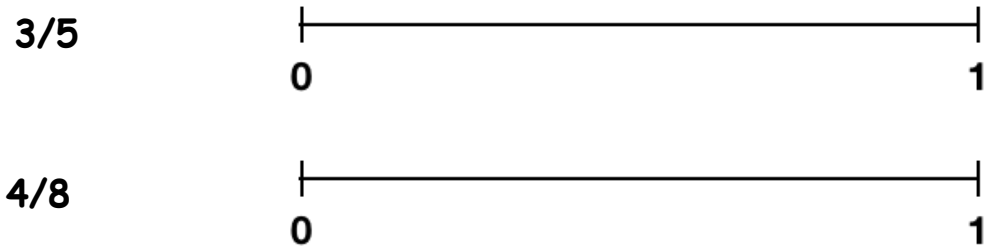
b) The variable **sides** is set to 6:

_____

4. What are some good reasons to use a loop in a program instead of repeating the same sequence of instructions? Check all reasons you think are valid.

   - ❑ The program is shorter
   - ❑ The code is harder for others to figure out
   - ❑ If you need to change one command, you only have to do it once
   - ❑ The code is easier to read
   - ❑ If you need to change one command, you have to do it many times

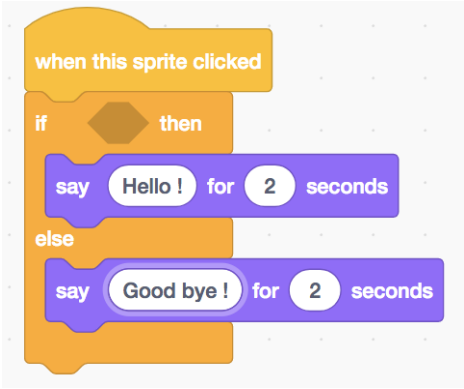
5. Represent the following fractions on a number line by first dividing the line into equal fraction parts (by drawing a tally mark) and then an x at the correct location on the number line.



6. A sequence of actions means that instructions are in a certain order.

   - ❑ True
   - ❑ False

7. The code below is missing something inside the if statement.



Which block of code should go inside the if statement so that:

It says *Hello !* when a variable called **pos** is equal to a variable called **Numerator** and says *Good bye!!* if the 2 variables are not equal.

Circle the correct block.