

Date: \_\_\_\_\_

Student Study ID Code: \_\_\_\_\_

Tasks to be completed: \_\_\_\_\_

**Setup:**

Before starting Morae, open the three resources in IE and minimize to task bar.  
Have paper & pencil available.

**General Instructions:**

For the following tasks, imagine that you are a student in a math course that uses the following resources [see list] to help students learn math concepts. Use these resources to help you complete the following assignments.

**Task A: Combining Like Terms**

1. Open the 'Algebra Basics' page.
2. Use the site to learn about Combining Like Terms and then do the activity on the 'workout' page on the website.

**Post-task instructions:**

1. Did participant complete the assignment?
2. Have participant fill out subjective survey
3. Ask participant to describe experience with the web site (record comments, both positive and negative)

**Task B: Word Problems**

1. Open the 'A Simple Word Problem' page.
2. Use the site to learn about Word Problems.
3. Review the examples of 'Problems of class  $x/a = b/c$ .
4. Find a list of word problems you can try to solve.  
[path: problems of class  $x/a = b/c$  > bottom of page > 'discussed & solved' link]
5. Solve the 'Crab's Weight' problem.

**Post-task instructions:**

- a. Did participant complete the assignment?
- b. Have participant fill out subjective survey
- c. Ask participant to describe experience with the web site (record comments, both positive and negative)

**Task C: Exponents**

1. Open the 'Exponents' page.
2. Use the site to learn about the Laws of Exponents.
3. Solve the problems on the handout, using the site as needed.

**Post-task instructions:**

- a. Did participant complete the assignment?
- b. Have participant fill out subjective survey

- c. Ask participant to describe experience with the web site (record comments, both positive and negative)

### **Task D: Graphing Equations**

- 1. Open the 'SparkNotes: Graphing Equations' page.**
- 2. Explore the Graphing Equations pages.**
- 3. Solve two of the slope problems on the website.**

**Post-task instructions:**

- a. Did participant complete the assignment?
- b. Have participant fill out subjective survey
- c. Ask participant to describe experience with the web site (record comments, both positive and negative)

### **Task E: Solving Linear Equations**

- 1. Open the 'Solver SOLVE Linear Equations' page.**
- 2. Explore the site for a few minutes to learn about solving linear equations.**
- 3. Try two of the practice problems.**
- 4. Follow along through the solution. How does it match your thinking as you solved the problem?**

**Post-task instructions:**

- a. Did participant complete the assignment?
- b. Have participant fill out subjective survey
- c. Ask participant to describe experience with the web site (record comments, both positive and negative)

### **Task F: Factoring**

- 1. Open the 'Factoring Numbers' page.**
- 2. Use the site to learn about factoring.**
- 3. Solve two of the problems on the site.**
- 4. What was it like to use this site to answer the factoring problems?**

**Post-task instructions:**

- a. Did participant complete the assignment?
- b. Have participant fill out subjective survey
- c. Ask participant to describe experience with the web site (record comments, both positive and negative)

## Exponents Handout

1. Simplify the following:

$$x^8/x^2 = \underline{\hspace{2cm}}$$

2. Solve the following:

$$2^{-3} = \underline{\hspace{2cm}}$$

3. Solve the following:

$$(4^2)^3 = \underline{\hspace{2cm}}$$

## Combining Like Terms Homework

1. Simplify this expression by combining like terms:

$$3x^2 - 6y + 4x^2 + 3y$$

2. Simplify this expression by combining like terms:

$$4m - 7mn + 7 + 8m$$