

Name \_\_\_\_\_ Date \_\_\_\_\_

**Description of Investigation and Student Report**  
**Be an Investigator**

Dear Investigator \_\_\_\_\_,  
 (name)

I design material that is used for clothes and furniture. My helpers have given me some designs. They have used fractions to describe the designs. Some of their statements don't seem right to me.

I would like your help because I hear you know about fractions. I'd like you to look at each design and tell me if the statement about it is true or false. If it is false, I'd like you to write a statement that is true.

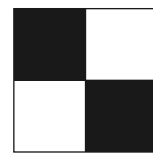
Thank you so much for your help.

Sincerely,  
 Susie Yang  
 Fabric Designer

**Information**

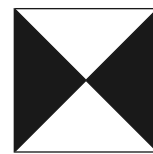
**John's Design**

My design is exactly one-fourth black.



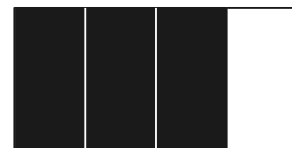
**Mio's Design**

My design is exactly one-half black.



**Tan's Design**

My design is exactly one-half black.



**Lupe's Design**

My design is exactly one-half black.



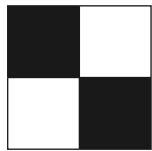
Name \_\_\_\_\_ Date \_\_\_\_\_

**Be an Investigator**  
**Student Report**

Dear Ms. Yang,

Here is what I have found when I looked at the designs.

**John's Design**



My design is exactly one-fourth black.

True or False: \_\_\_\_\_

\_\_\_\_\_

**Mio's Design**

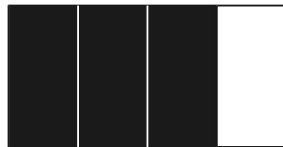


My design is exactly one-half black.

True or False: \_\_\_\_\_

\_\_\_\_\_

**Tan's Design**



My design is exactly one-half black.

True or False: \_\_\_\_\_

\_\_\_\_\_

**Lupe's Design**



My design is exactly one-half black.

True or False: \_\_\_\_\_

\_\_\_\_\_

I hope this helps you.

Yours truly,

Investigator \_\_\_\_\_

(your name)