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

**Formative Assessment Task: A-SSE.1.1**

**Ink Orders**

A publishing company orders black and blue ink in a bulk for its two-color printing press. To keep things simple with its ink supplier, each time it places an order for blue ink, it buys *B* gallons, and each time it places an order for black ink, it buys *K* gallons. Over a one-month period, the company places *m* orders of blue ink and *n* orders of black ink.

 ***Part A:*** What quantities could the following expressions represent in terms of the problem context?

 $m+n$

 $mB+nK$

 $\frac{mB+nK}{m+n}$

***Part B:*** The company placed twice as many orders for black ink than for blue ink in January. Give interpretations for the following expressions in terms of the orders placed in January, and explain which expression must be greater using those interpretations.

 $\frac{m}{m+n}$ and $\frac{n}{m+n}$