

Grade 4 Math - Unit 3 Study Guide

Name: _____ Date: _____

Part A: For questions 1 – 3, read and solve each problem; choose the best answer from the choices provided for each item.

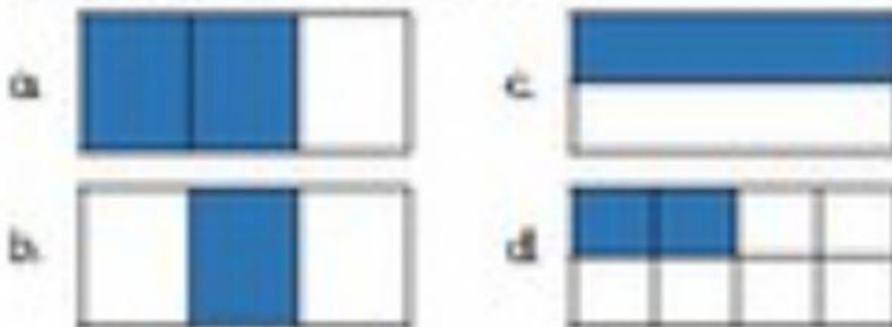
1. Aliana and Brianna shared a box of cookies. Aliana ate $\frac{5}{8}$ of the cookies and Brianna ate $\frac{1}{6}$ of the cookies. Which number sentence compares the fraction amounts they each ate?

- a. $\frac{5}{8} < \frac{1}{6}$
- b. $\frac{5}{8} = \frac{1}{6}$
- c. $\frac{5}{8} > \frac{1}{6}$

2. **MGSE.4.NF.1:** Nyla is playing a math game. She has a card with the fraction model shown.



She looked at the shaded portion and needs to find another card with a different fraction model that represents the same fraction as her card. Which fraction model represents the same fraction (shaded) as Nyla's fraction model?



3. Two fraction models are shown. Use the fraction models to help answer the question.



Which statement is true about the fraction models?

- a. The fractions $\frac{1}{4}$ and $\frac{3}{12}$ are equivalent because they each have the same number of parts.
- b. The fractions $\frac{2}{4}$ and $\frac{6}{12}$ are equivalent because they each have the same number of parts.
- c. The fractions $\frac{1}{4}$ and $\frac{3}{12}$ are equivalent because the size of one larger part equals the size of the one smaller part.
- d. The fractions $\frac{2}{4}$ and $\frac{6}{12}$ are equivalent because the size of two larger parts equals the size of six smaller parts.

Part B: Multiple-Select Response Items

4. Jareli bought a bag of oranges.
- She used $\frac{3}{6}$ of the oranges to make orange juice.
 - She used $\frac{4}{8}$ of the oranges to make a fruit salad.
 - She put $\frac{2}{5}$ of the oranges in a bowl on the table.
 - She put $\frac{2}{12}$ of the oranges in the refrigerator.

Which statement(s) are NOT true?

- a. Jareli put more oranges in the refrigerator than she left on the table.
- b. Jareli used more oranges to make orange juice than she left on the table.
- c. Jareli used the same amount of oranges to make orange juice and fruit salad.
- d. Jareli used more oranges to make a fruit salad than she used to make orange juice.

Part C: Constructed Response Items

For question 5-6, read each problem carefully and use a problem solving strategy to solve each problem. Show your mathematical thinking and record your final solution.

5. The models shown are shaded to represent Fraction 1 and Fraction 2.



Part A: Write an inequality that compares the sizes of these two fractions. Use the correct symbol ($=$, $>$, or $<$). Explain how you compared their sizes.

Fraction 3



Part B: A new un-shaded model labeled Fraction 3 is shown. What fraction of the whole does each section of Fraction 3 represent?

Part C: For Part B, is one section of the Fraction 3 model greater than or less than one section of the Fraction 1 model? Explain your answer and/or show your work.

Part D: How many sections of the model would you shade to make Fraction 3 greater than Fraction 1 but less than one whole? Explain your answer and/or show your work.

6. The table shows the fraction of months during one year that each of four friends went swimming at least once.

Swimming	
Friend	Months
Allison	$\frac{4}{6}$
Blake	$\frac{2}{3}$
Chandrel	$\frac{1}{2}$
Gus	$\frac{3}{4}$

Part A: Chandrel said she swam more months than Gus. Use the fraction bars below and shade each fraction bar to show the fraction each friend swam.

Chandrel

Gus

Part B: Is Chandrel correct? Explain.