Grade 7 Math Test
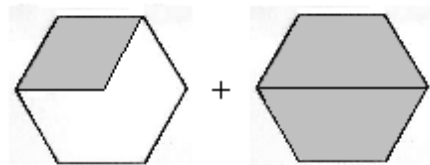## Unit 5 Operations with Fractions

Name:_____

Part A: Multiple Choice. Circle the best answer.

1. Which addition statement best represents the model below?   1._____

7N5.1

+

A. $1 + 1 = 2$

B. $\frac{1}{3} + 1 = \frac{3}{2}$

C. $\frac{1}{3} + 1 = 1\frac{1}{3}$

D. $\frac{1}{3} + \frac{2}{2} = \frac{2}{3}$

2. What is the answer to $\frac{3}{10} + \frac{3}{10}$ in **lowest terms**?   2._____

7N5.2

A. $\frac{0}{10}$

B. $\frac{3}{10}$

C. $\frac{6}{10}$

D. $\frac{3}{5}$

3. Find a common denominator for the fractions $\frac{1}{5}$ and $\frac{2}{3}$.   3._____

A. 3

B. 5

7N5.3

C. 8

D. 15

4. What is $\frac{6}{18}$ written in lowest terms?   4._____

A. $\frac{6}{18}$

B. $\frac{3}{9}$

7N5.4

C. $\frac{1}{3}$

D. $\frac{1}{2}$

5. Add $\frac{2}{3} + \frac{5}{9}$. Reduce your answer if necessary.   5._____

    A. $\frac{11}{9}$
    B. 1
    C. $1\frac{1}{9}$
    D. $\frac{7}{12}$

6. What is the difference between $\frac{7}{9} - \frac{5}{9}$? Reduce answer if necessary.   6._____

    A. 2

    B. 0

    C. $\frac{2}{0}$

    D. $\frac{2}{9}$

7. If Samantha eats $\frac{2}{3}$ of the pizza and Devon eats $\frac{1}{4}$ of the pizza,   7._____
how much more pizza does Samantha eat than Devon?

    A. $\frac{2}{3}$

    B. $\frac{5}{12}$

    C. $\frac{1}{1}$

    D. $\frac{4}{12}$

8. If Sandra drinks $1\frac{3}{4}L$ of Crystal Lite and then drinks $2\frac{2}{3}$ L   8._____
of milk, what is the total amount of liquids that she drank?

    A. 4 L
    B. 3 L
    C. $3\frac{5}{12}$ L
    D. $4\frac{5}{12}$ L

9. What is $2\frac{7}{8} - 1\frac{1}{4}$? Reduce your answer if necessary.   9._____

   A. $1\frac{6}{4}$

   B. $1\frac{3}{2}$

   C. $1\frac{5}{8}$

   D. $1\frac{2.5}{4}$

10. What addition equation best represents the model below?   10._____

   A. $1\frac{3}{4} + 1\frac{3}{8} = 3\frac{1}{8}$

   B. $1\frac{3}{4} + 1\frac{3}{8} = 2\frac{1}{8}$

   C. $4\frac{3}{4} + 8\frac{3}{8} = 12\frac{1}{8}$

   D. $4\frac{3}{4} + 8\frac{3}{8} = 12\frac{6}{12}$

Part B: Complete all questions and be sure to show all your workings.

1. Use a model of your choice to find each solution. State the answer. (4 marks)

7N5.7   A) $\frac{3}{8} + \frac{1}{4}$ B) $2\frac{2}{3} - 1\frac{1}{6}$

7N5.12

2. Calculate each answer. Reduce your answer if necessary. (3 marks)

A) $\frac{1}{6} + \frac{2}{6}$ B) $\frac{5}{12} - \frac{1}{6}$

7N5.2
&
7N5.6

3. Estimate, then calculate each operation. Reduce your answer if necessary. (6 marks)

$\frac{3}{8} - \frac{1}{8}$	$\frac{2}{9} + \frac{5}{6}$
Estimate	Estimate
Actual Solution	Actual Solution

4. This week, Mark practiced piano for $2\frac{1}{2}$ hours, played soccer for $5\frac{1}{4}$ hours and talked on the phone for $1\frac{1}{3}$. What was the total amount of time spent on these activities? Reduce your answer if necessary. (3 marks)

5. Find the answer and be sure to put your fraction in lowest terms.   (8 marks)

A) $\frac{2}{9} + 1\frac{5}{6}$

B) $3 + 1\frac{1}{5}$

C) $2 - \frac{3}{4}$

D) $2\frac{4}{7} - 1\frac{2}{3}$