

2009-2010 Idaho 6th Grade Direct Mathematics Assessment

Place Student Label Here

STUDENTS DO NOT WRITE IN THIS AREA

ROUND 1
T: _____ R: _____

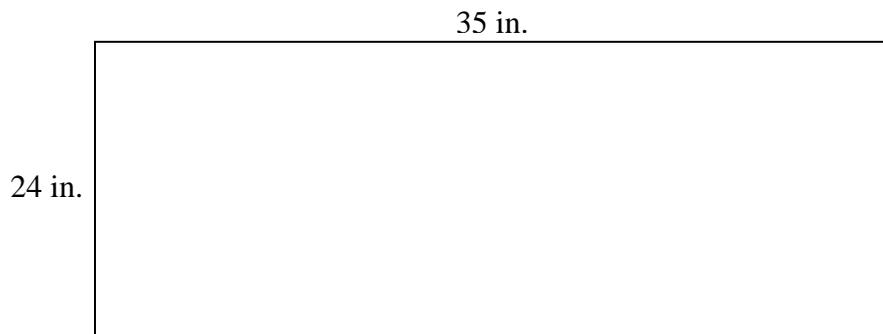
ROUND 2
T: _____ R: _____

FINAL

Your teacher will read the entire test to you before you begin. It is important that you show how you solve the problems on this assessment. No calculators are allowed on this assessment.

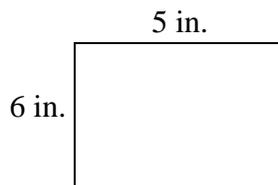
You must solve all five problems on this assessment.

1. Jenny brought home a large tray to store her art supplies.



Show or explain how you found your answers.

- a. What is the perimeter of Jenny's tray? What is the area?
- b. Jenny also brought home some boxes to help her sort her supplies. What is the area of the bottom of one box?



- c. Using the box shown in question b, how many boxes would it take to completely cover the tray?

2. The two most popular restaurants in town for teenagers to eat lunch are the Hamburger Hut and the Sandwich Shack. The chart below shows the menu items and their costs.

Hamburger Hut	
Hamburger	\$5.65
French Fries	\$2.10
Cup of Soup	\$2.50
Pop	\$2.00
Piece of pie	\$2.35
Milkshake	\$3.20

Sandwich Shack	
Hamburger	\$5.85
French Fries	\$1.95
Cup of Soup	\$2.95
Pop	\$1.75
Piece of pie	\$4.10
Milkshake	\$3.95

Show or explain how you found your answers.

- a. If five people order a total of 5 hamburgers, 2 fries, and 5 pops at the Sandwich Shack, how much money will each person have to pay if they equally share the total cost?
- b. Where would you spend less money for a hamburger, French fries, a cup of soup, and a pop? How much money would you save?
- c. A 16 ounce milkshake at the Hamburger Hut costs \$3.20. How much does the milkshake cost per ounce?
- d. Max and his friends ate $\frac{3}{8}$ of a lemon meringue pie and $\frac{5}{8}$ of an apple pie. How much more of the apple pie was eaten than the lemon meringue pie? Write your answer as a fraction.

3. Monte's parents told him that he needed to finish all of his chores before he could go to a friend's house. His chores include mowing the lawn, cleaning his room, and folding clothes. Mowing the lawn takes Monte 50 minutes, cleaning his room takes half an hour, and folding clothes takes 20 minutes.
Show or explain how you found your answers.

a. How long does it take Monte to complete all of his chores?

b. What time will Monte be finished with all of his chores if he starts at 10:30 AM?

c. If Monte gets his friend to help him, they could finish the chores in half the time. What time would they finish if his friend helps him?

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4. Ms. Murphy teaches music to 18 students after school. She teaches both piano and singing lessons.
Show or explain how you found your answers.

a. Ms. Murphy teaches singing lessons to all 18 students. Three more than half of those students also take piano lessons. How many students take piano lessons?

b. What fraction of the 18 students takes both singing and piano lessons?

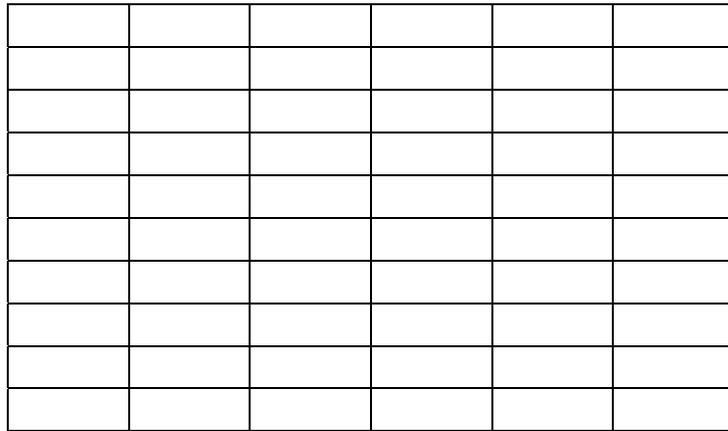
c. Write an equation (number sentence) that could be used to solve part a.

5. Roberto is trying to decrease his time on the 1 mile run. He recorded his time every Monday for 5 weeks.

Week	1	2	3	4	5
Time	10 min	9 ½ min	9 min	8 ½ min	8 min

Show or explain how you found your answers.

- a. Draw a line graph that shows Roberto's weekly time. Remember to label the graph.



- b. What is the range of Roberto's weekly mile times?
- c. What is the mean (average) of Roberto's running times for the first 5 weeks?
- d. If Roberto continues to improve his time at the same rate, what week will he be able to run a mile in 6 minutes?

Which prompt did you find to be the most difficult to solve?
Why?

1	2	3	4	5
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Which prompt did you find to be the least difficult to solve?
Why?

1	2	3	4	5
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