

Title I Inventories

These inventories were compiled in Title I several years ago as a measuring tool to show growth. These inventories were designed with the intention that each grade level test be given at the beginning of the year as a pretest for concepts to be acquired during the year. **When given as a pretest it is essential that students understand that they are not expected to know most of the material. Tell the students to merely peruse the inventory to see if there are any questions they feel they would like to attempt.** Explain to the students that these same tests will be given again at the end of the year to show how much they have learned. Every box is aligned to one or more of the ASD Performance Standards for the particular grade level.

In the past few years non-Title schools have requested these inventories. As well as a measure of growth, these inventories have been used to guide instruction by identifying gaps in a student's mathematical understanding. To use it for this purpose, teachers have been giving the inventories from **previous grade levels**.

In this packet you will find: the inventories, the answer sheets for the inventories, the alignments to the ASD Performance Standards, and the grade level ASD Performance Standards. Also included is a grid on which a teacher may record the correct and incorrect answers for each question.

Math Inventory Assessment Administration

Grade 5

- Inventories may take about 1 hour to administer.
- You may choose to administer them one page at time.
- You may read the problem if it does not include “reading a number correctly”.
- You should not use any other questioning strategies.
- Please do not define any terms.
- Manipulatives should be provided.
- The inventories may be copied on overheads and read item by item to the whole class. This is particularly important in the primary grades but may extend to the intermediate grades, as needed.
- Teachers should score the inventories and correlate them to the standards so that they can focus their future instruction more precisely. A tally sheet is provided to help you highlight patterns across the class.
- *To guide instruction, use the previous grade’s inventory in the fall.* Some teachers administer grade level inventories in January, as well as in September and April; this can aid in keeping instruction focused upon the children’s needs.
- *To show growth, use the current grade level inventory in the fall and the spring.*

Grade 5 Math Inventory

page 1

Name _____
Date _____
Teacher _____

1. Round to the nearest hundred:

32,641.78

6. Estimate:

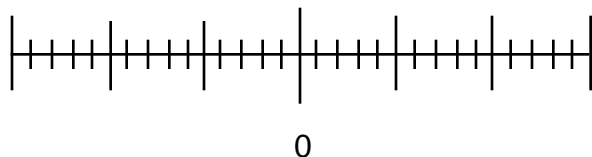
25.24 * 19.78 = _____

Complete the following chart for numbers 2 through 4.

	Fraction	Decimal	Percent
2.	$\frac{9}{100}$		
3.			80 %
4.		0.5	

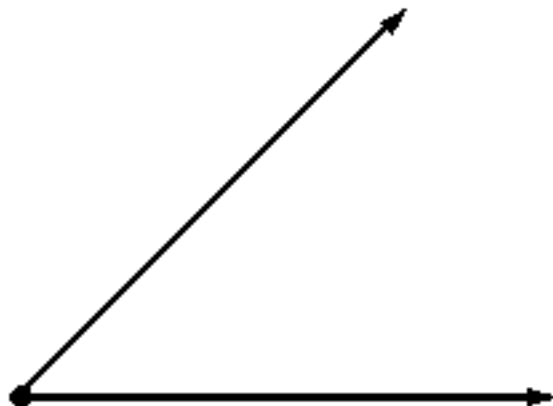
7. Give 2 possible perimeters for a rectangle with an area of 24 square units. (Assume length of sides do not include fractions.)

5. Use the number line to place and label the following numbers: **-15; -3; 7; 15**



8. Estimate the measure of the angle.

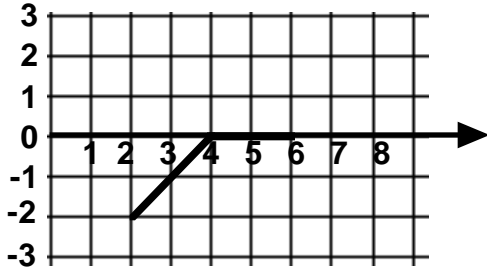
_____ degrees



Grade 5 Math Inventory

page 2

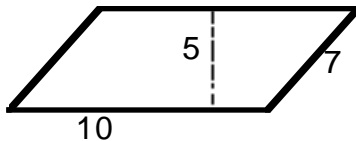
9. Plot and label the following points:
A (2, -2), B (4,3), C(6,0), D (4,-2)



10. Construct \overline{AB} ; \overline{BC} ; \overline{BD} ; \overline{AD} ; \overline{DC}

11. Name the polyhedron you drew in number 10.

12. Show how would you find the area of this parallelogram?



Area = _____ square units

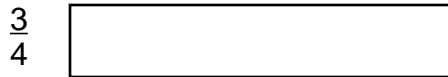
- 13.

$27 * 0.10 =$ _____

14. Write the numeral for **7 billion, 32 million, 7 thousand ten and 78 thousandths.**

15. Use X's or dots to show **28** divided by **4**.

16. Shade the bars to show:



Use $<$, $>$ or $=$ to make the statement true:

$\frac{2}{3}$ \bigcirc $\frac{3}{4}$

Grade 5 Math Inventory

Use the table to answer the following questions.

g	t
$\frac{1}{2}$	2
0	0
2.5	10
$\frac{1}{4}$	1
5	20

17. State in words the rule for the table above.

18. Circle the number sentence that describes the rule for the table above.

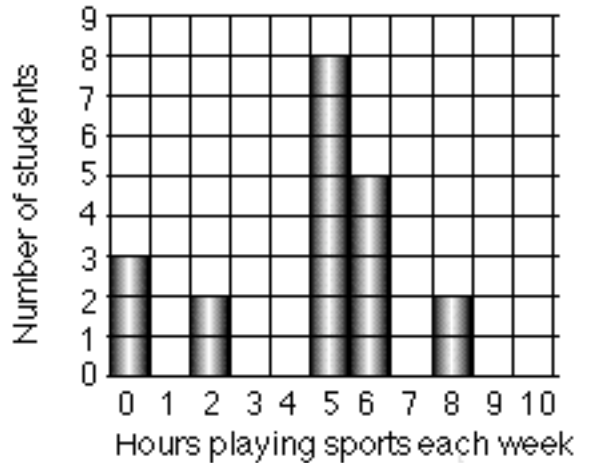
$g = 2 * t$ $t = 2 * g$ $t = 4 * g$

19. Complete the chart:

mixed number	fraction
$7 \frac{1}{2}$	$\frac{15}{2}$
	$\frac{13}{3}$
$4 \frac{3}{8}$	
	$\frac{17}{5}$
$2 \frac{7}{10}$	

Use the information below to answer the questions 20-23.

Students in Mrs. Thompson's class completed a survey to determine the number of hours students play sports each week. They compiled the data and made the bar graph below.



20. What is the range? _____

21. What is the median? _____

22. What is the mode? _____

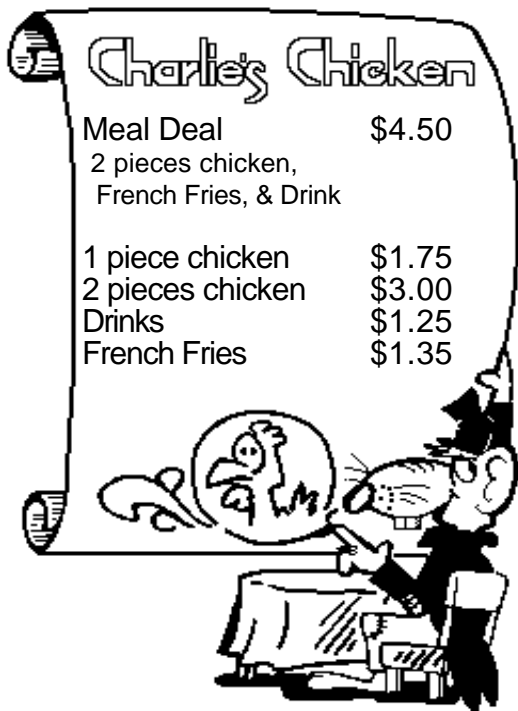
23. If a new student was to enter the class, what is the probability that the student would not play sports?

24. $\frac{4}{9} - \frac{1}{3} =$ _____

Draw a picture to show how to work it out:

Grade 5 Math Inventory

Use the menu below for questions number 25 and 26.



25. How much money do you save buying the meal deal rather than the same items separately?

26. You bought 3 drinks and 3 french fries for yourself and two friends. How much money did you spend?

27. $n + 13 + 27 = 45$

$n =$ _____

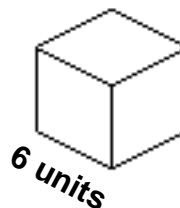
Show your work:

28. List all the factors of the number 48.

29. Mrs. Reiz bought 8 roses for \$12.00. How much did each rose cost?

How did you figure it out?

30. Find the surface area of the cube below.



Fifth Grade Math Inventory Answer Key

- | | |
|---|--|
| 1) 32,600 | 18) $t=4*g$ |
| 2) .09, 0.09 or 0.090 and 9% (1/2 pt. each) | 19) $4\frac{1}{3}$, $35/8$, $3\frac{2}{5}$, $27/10$ |
| 3) $80/100$, $8/10$, or $4/5$ and .8, .80, 0.8 or 0.80 (1/2 pt. each) | 20) from 0 to 8 hours, or 8 |
| 4) $5/10$, $50/100$, or $1/2$ and 50% (1/2 pt. each) | 21) median hours=5 |
| 5) numerals placed correctly on the number line (any 2 correct = 1/2pt.) | 22) mode=5 |
| 6) \$500. or \$505. | 23) $3/20$, 3:20, 3 out of 20, or, about 15% |
| 7) 50, 28, 22 or 20 (1/2 pt. each) | 24) $1/9$, or $3/27$; strategy (1/2 pt. each) |
| 8) 40-50 degrees | 25) \$1.60 or \$1.10 |
| 9) any 2 pts. =1/2 pt. | 26) \$7.8 |
| 10) any 2 segments drawn correctly=1/2 pt. | 27) $n=5$ |
| 11) rectangular pyramid (1/2 pt. each word) | 28) 1, 2, 3, 4, 6, 8, 12, 16, 24, 48 in any order |
| 12) 50 square units; strategy (1/2 pt. each) | 29) \$1.50; strategy (1/2 pt. each) |
| 13) 2.7 | 30) 216 square units |
| 14) 7,032,007,010.078 | |
| 15) rectangular array 4 by 7 or other equivalent | |
| 16) $2/3$ of the top bar shaded and $3/4$ or other equivalent pictured below; < (1/2 pt. each) | |
| 17) t equals g times 4 (or equivalent statement) | |

