

North Dakota Department of Public Instruction

**Title I
Fifth Grade Math Standards**

Student: _____

School Year: _____ Grade: _____

Teacher: _____

- _____ Identify place value concepts from thousandths through the billions place.
- _____ Order and compare integers.
- _____ Order and compare whole numbers to the thousands.
- _____ Round whole numbers through the millions place.
- _____ Use negative integers in real-world situations.
- _____ Identify prime, composite, odd, and even numbers.
- _____ Order and compare fractions with like and unlike denominators.
- _____ Round, compare, and order decimals through the thousandths.
- _____ Correlate fractions, decimals, and percents.
- _____ Represent ratios using models and pictures.
- _____ Use proportions to solve problems.
- _____ Determine the prime factors for a number.
- _____ Determine least common multiple and greatest common factor for a set of numbers.
- _____ Use order of operations to calculate simple numbers sentences.
- _____ Multiply multi-digit numbers by three-digit numbers.
- _____ Divide multi-digit numbers by two-digit numbers with or without remainders.
- _____ Add and subtract fractions with unlike denominators including improper fractions and mixed numbers.
- _____ Multiply and divide fractions.
- _____ Add, subtract, multiply, and divide multi-digit decimals.
- _____ Use all quadrants in the coordinate system.
- _____ Read and interpret graphs and frequency tables.
- _____ Determine probability of a simple event and express as a ratio.
- _____ State all possible outcomes for a given situation.
- _____ Estimate and measure length to the nearest eighth of an inch.
- _____ Measure or draw angles using protractors and compasses.
- _____ Select and use appropriate units when measuring length, area, and volume.
- _____ Represent and analyze patterns using tables and graphs.
- _____ Represent and use the concept of a variable.
- _____ Apply the concept of expressions, equations, and inequalities.
- _____ Use models to determine the sum of the interior angles of quadrilaterals and triangles.

Title I Math Test Fifth Grade Standards

Name: _____

Date: _____

Find the place value of the underlined digit.

- | | | |
|----|--------------------------|--|
| 1. | 2 <u>1</u> ,202,432.42 | |
| 2. | <u>3</u> ,114,876,009.09 | |
| 3. | 43.049 <u>3</u> 78 | |
| 4. | 400.0046 <u>5</u> 7 | |

5. Order the following numbers from the least to greatest:

4,302 4,312 4,492 402

_____, _____, _____, _____.

Place $<$, $>$, or $=$ in the space provided to make the statement true.

- | | | | |
|-----|-----------------------------------|-----|-----------------------------------|
| 6. | 45,609 _____ 45,619 | 7. | 3,092,457 _____ 3,092,450 |
| 8. | 4.556 _____ 4.5 | 9. | 30.098 _____ 31.9 |
| 10. | $\frac{1}{2}$ _____ $\frac{2}{3}$ | 11. | $\frac{5}{8}$ _____ $\frac{3}{4}$ |

12. Round 4,973,214.0953 to the nearest ten thousands place. _____

13. Round 445,302.76345 to the nearest thousandths place. _____

14. Order the following integers from the least to the greatest:

1

10

-4

-2

_____, _____, _____, _____.

15. At noon, the temperature was 4 below zero (-4°). Two hours later the temperature dropped 5 degrees. How cold was it at 2:00 p.m.?

16. The temperature is 10 degrees below zero (-10°). The temperature increases by 16° . What is the temperature after the increase?

17. Place a circle around all prime numbers from the list below.

4

7

13

16

22

18. List the prime numbers between 42 and 60.

19. Order the following fractions from the least to the greatest.

$\frac{2}{3}$

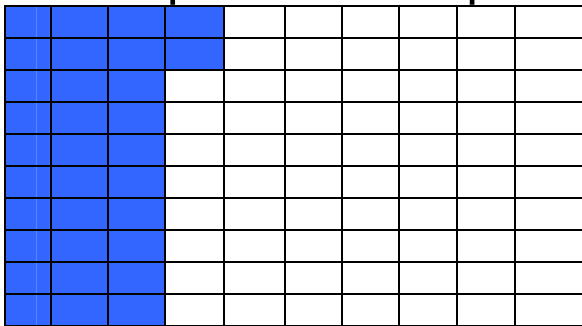
$\frac{3}{8}$

$\frac{1}{2}$

$\frac{3}{4}$

_____ , _____ , _____ , _____ .

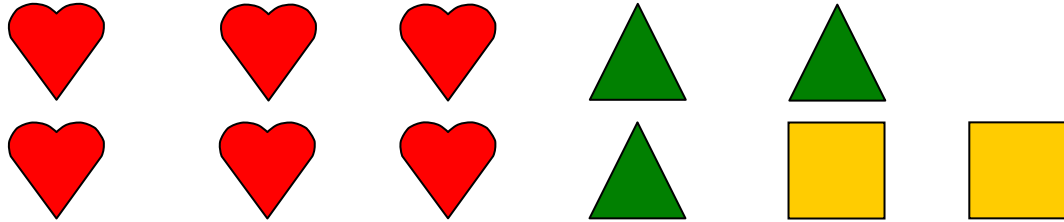
20. Write a percent to represent the grid shown below.



21. Use a decimal to represent the grid shown in question 20.

22. Use a fraction to represent the grid shown in question 20. Write your answer in simplest form.

Use the shapes below to answer questions 23 and 24.
Write your ratios in simplest form, if necessary.



23. Write a ratio comparing the number of triangles to the total number of shapes.

24. Write a ratio comparing the number of squares to the number of hearts.

25. Find the greatest common factor of 12 and 20.

26. Find the greatest common factor of 48 and 60.

Solve for X.

27. $\frac{4}{9} = \frac{x}{27}$ _____

28. $\frac{9}{12} = \frac{3}{x}$ _____

Simplify the following expressions.

29. $3 \times 4 + (8 - 3)$ _____

30. $(4 - 2) + (5 + 2)$ _____

Multiply

31.
$$\begin{array}{r} 356 \\ \times 23 \\ \hline \end{array}$$

32.
$$\begin{array}{r} 4,962 \\ \times 243 \\ \hline \end{array}$$

Divide

33. $5,687 \div 7 =$ _____

34. $94,732 \div 49 =$ _____

Add. Write the answer in simplest form.

35. $\frac{1}{8} + \frac{5}{8} =$ _____

36.
$$\begin{array}{r} 4 \frac{1}{8} \\ + 3 \frac{2}{3} \\ \hline \end{array}$$

Subtract. Write the answer in simplest form.

37. $\frac{7}{8} - \frac{1}{4} =$ _____

38.
$$\begin{array}{r} 5 \frac{7}{8} \\ - 1 \frac{1}{4} \\ \hline \end{array}$$

Multiply. Write answer in simplest form.

39. $\frac{3}{4} \times \frac{1}{2} =$ _____

40. $\frac{1}{3} \times \frac{3}{8} =$ _____

Divide. Write answer in simplest form.

41. $\frac{5}{8} \div \frac{3}{4} =$ _____

42. $\frac{5}{8} \div \frac{7}{8} =$ _____

Add

43. $16 + 4.086 =$ _____

44. $3.2 + 148.01 =$ _____

Subtract

45. $400 - 32.49 =$ _____

46. $35.078 - 5.79 =$ _____

Multiply.

47.
$$\begin{array}{r} 5.07 \\ \times 3 \\ \hline \end{array}$$

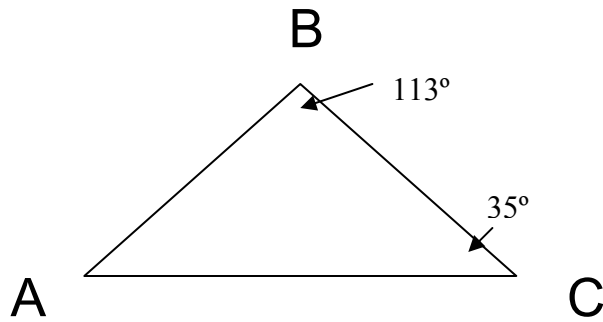
48.
$$\begin{array}{r} 4.092 \\ \times 4.3 \\ \hline \end{array}$$

Divide. Round to the nearest hundredth place, if necessary.

49. $4.58 \div 2 =$ _____

50. $5.094 \div .3 =$ _____

51. Give the measurements of $\angle B$ and $\angle C$, find the measurements of $\angle A$.



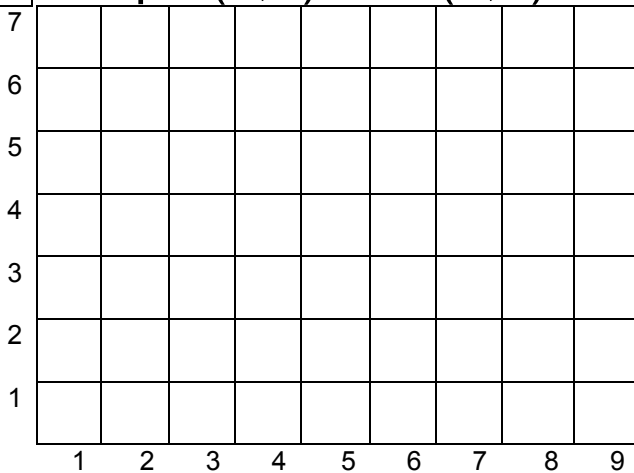
$\angle B$ _____

$\angle C$ _____

$\angle A$ _____

52. If a triangle has two angles that measure 90° and 45° , what would be the measurement of the third angle?

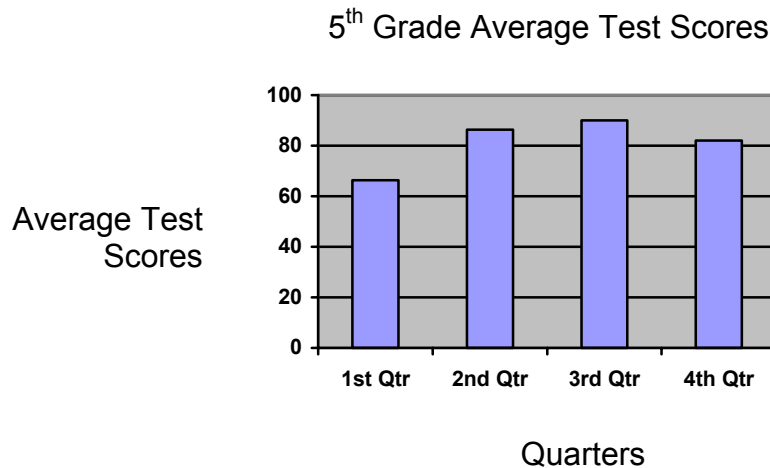
53. Graph $(3,4)$ and $(6,2)$ on the grid below.



54. What is the probability of shaking an even number on a cube numbered 1-6? Express the answer in simplest form.

55. List all possible outcomes when tossing three coins. An example is HHT (Heads, Heads, Tails).



Use the bar graph below to answer the questions 56 and 57.



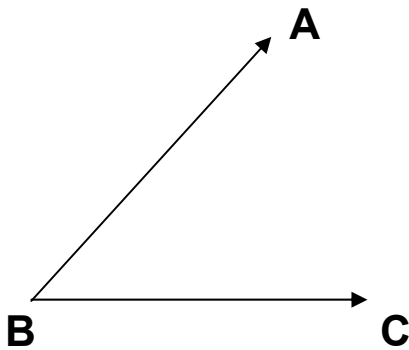
56. Approximately what percent did the average test scores in fifth grade increase from 1st to 2nd quarter?

57. Which quarter had the highest test score average?

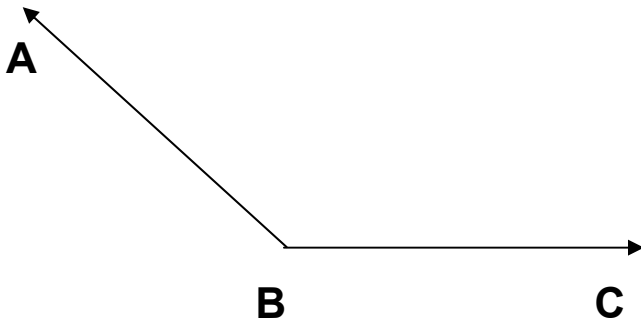
Measure the lines in questions 58 and 59 to the nearest $\frac{1}{8}$ of an inch.

	Lines to be measured below	Answer
58.		_____
59.		_____

Use a protractor to measure $\angle ABC$ in the problems listed below.



60. _____



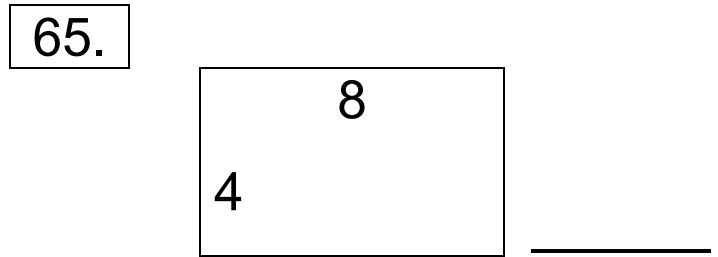
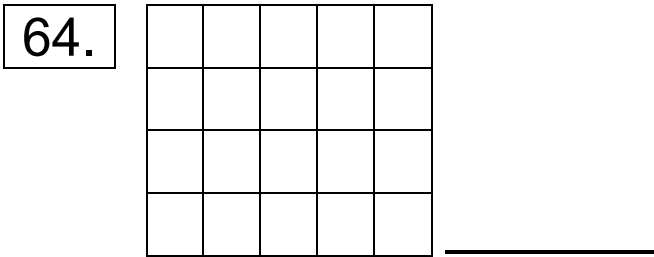
61. _____

Find the missing numbers.

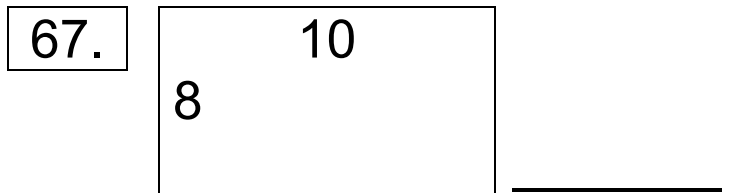
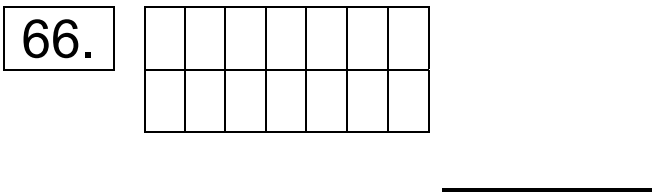
62. $9 + \square = 14$

63. $10 - \square = 8$

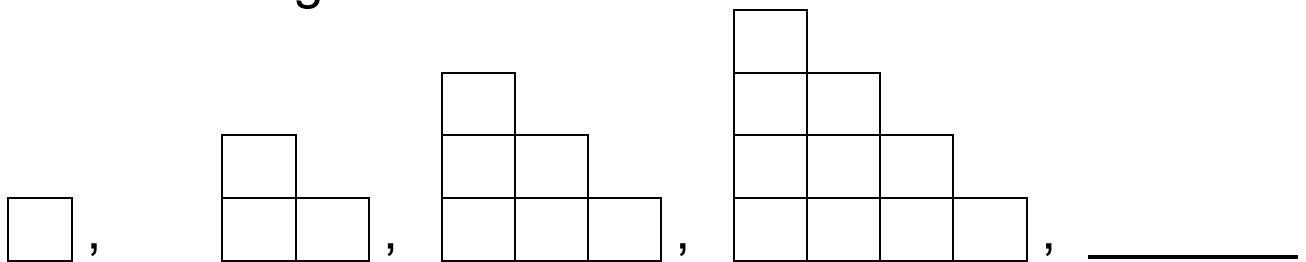
Find the area of the polygons in questions 64 and 65.
Dimensions are in inches.



Find the perimeter of the polygons in questions 66 and 67. Dimensions are in inches.



68. Given the pattern below, how many squares would be in the next figure.



69. Write the next two numbers of the pattern.

1, 3, 7, 13, _____, _____.

Place $<$, $>$, or $=$ in the spaces below to make the sentences true.

70. $6 + 2$ _____ $8 - 5$

71. 6×2 _____ $10 + 2$