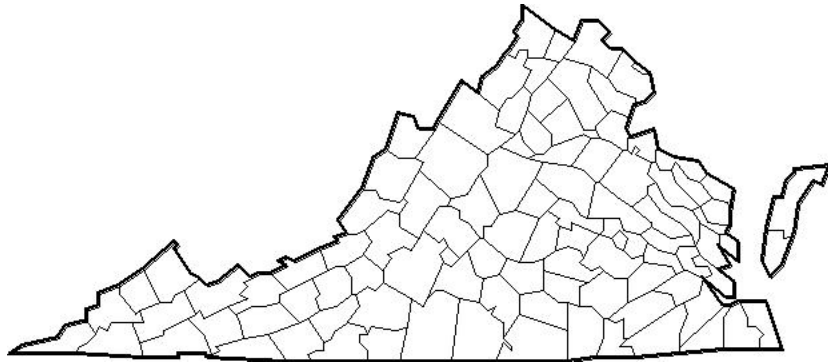# TESTS FOR HIGHER STANDARDS

MATHEMATICS

Common Core

GRADE LEVEL TEST

Grade 8

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College of William and Mary

SP.3

32. Cyndi is growing her hair to donate to a local charity. She is told that her hair grows at a rate of $\frac{3}{4}$ inch per month. To determine how long it will take her to grow her hair to 12 inches, Cyndi writes the equation $L = 6 + \frac{3}{4}t$, where L is the length of her hair and *t* is time in months.

What was the length of Cyndi's hair when she decided to grow it for charity?

A   4.5 inches
B   6 inches
C   8 inches
D   12 inches

SP.4

33. A teacher recorded the locations of the students who received certain grades. Of the students who received "A" grades, 15 sat in the front of the classroom, 8 sat in the middle, and 2 sat in the back. Of the students who received "F" grades, 1 sat in the front, 6 in the middle, and 12 in the back. Which of the following summarizes the data in a two-way table?

A

	front	middle	back
"A" grade	15	8	2
"F" grade	1	6	12

B

	front	middle	back
"A" grade	1	6	12
"F" grade	15	8	2

C

	front	middle	back
"A" grade	15	2	6
"F" grade	8	1	12

D

	front	middle	back
"A" grade	15	8	2
"F" grade	12	6	1

NS.1
34. Place an X in the blank if the number is rational.

_____ -7.5

_____ $\sqrt{9}$

_____ $\sqrt{11}$

_____ $18.1\overline{25}$

_____ $8.56425721...$

EE.4
35. 260 million people spent a total of 3.5 billion dollars on bicycles in 1994. Use scientific notation to find the average amount per person spent on bicycles.

Write your answer here: _____

F.4
36. Given the table, write an equation that describes the relationship between f(x) and x.

x	f(x)
-2	36
-1	25
0	16
1	9

Write your answer in the box: