TESTS FOR HIGHER STANDARDS
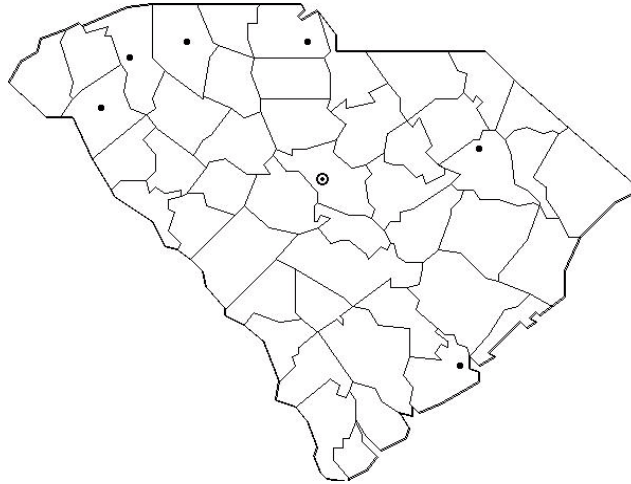
MATHEMATICS

HSAP Exam

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FOR THE SOUTH CAROLINA CURRICULUM STANDARDS

NO-1.2A
8.   Add parentheses to make this statement true: $12 \bullet 2 + 3 = 60$.

A $(12 \bullet 2 + 3) = 60$
B $(12 \bullet 2) + 3 = 60$
C $12 \bullet (2 + 3) = 60$
D $12 \bullet (2) + 3 = 60$

NO-1.2A
9.   Find the missing number in:
     $3 (21 + \underline{\ ?\ }) = 3(21) + 3(15)$.

A   3
B   15
C   21
D   91

NO-1.2B
10. **What postulate or property for equations justifies the following steps in a proof?**

Statements	Reasons
1. $xy = z$	1. Given
2. $\dfrac{1}{x} \cdot xy = \dfrac{1}{x} \cdot z$	2. ?

A   multiplication property
B   multiplicative identity
C   commutative property
D   distributive property

NO-2.1A
11. **At a Chinese restaurant you order sweet and sour soup for $1.25 and beef with broccoli for $7.25. Sales tax is 10%. What is the total of your bill including sales tax?**

A $7.25
B $8.50
C $9.35
D $10.00

MG-1.1D
43. Which choice uses the correct dimensional analysis to convert 3.2 miles to feet?

A $\dfrac{3.2\,\text{miles}}{1} \bullet \dfrac{5,280\,\text{ft}}{1\,\text{mile}}$

B $\dfrac{3.2\,\text{miles}}{1} \bullet \dfrac{1\,\text{ft}}{12\,\text{inches}}$

C $\dfrac{3.2\,\text{miles}}{1} \bullet \dfrac{1\,\text{mile}}{5,280\,\text{feet}}$

D $\dfrac{1}{3.2\,\text{miles}} \bullet \dfrac{5,280\,\text{ft}}{3.2\,\text{miles}}$

MG-1.1E
44. One quart is about how many liters?

A   1
B   2
C   2.5
D   5

MG-2.1A
45. Which of the following statements is <u>false</u>?
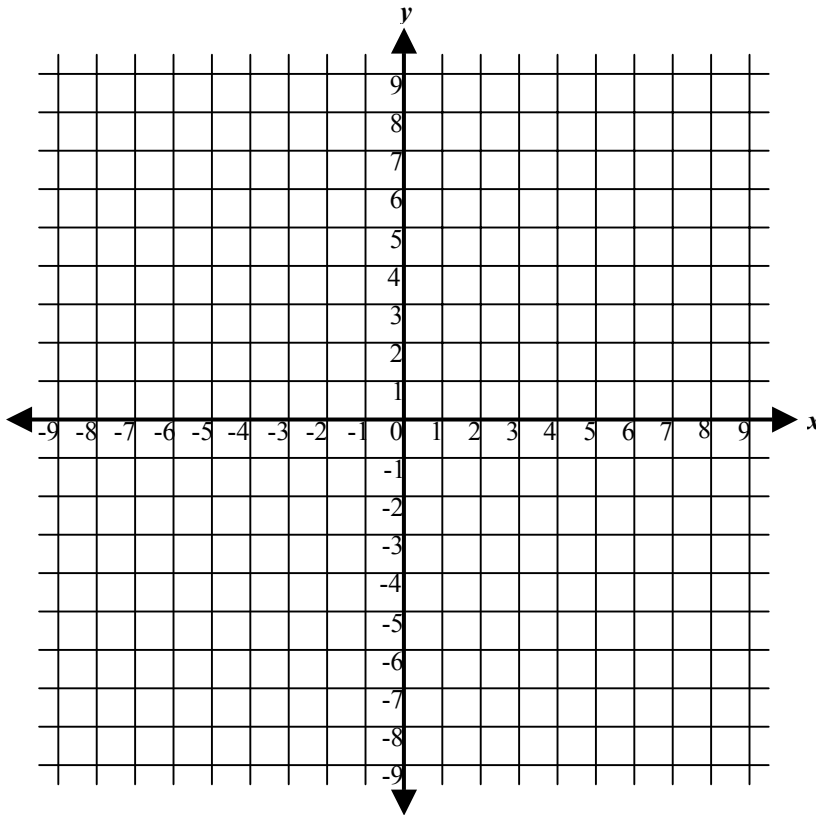
A   A rhombus is a quadrilateral with four congruent sides.
B   A rectangle has only two 90° angles.
C   A trapezoid has one pair of parallel sides.
D   A square has four 90° angles and four congruent sides.

MG-2.2B

68. A rectangle is formed by the following coordinates:
    A (-3, 2)   B (3, 2)   C (3, 0)   D (*x, y*)

   a.   Graph the rectangle and record the missing coordinates for D. _____

MG-2.2C

   b.   Dilate the rectangle on the grid by a scale factor of 2. What are the new coordinates?

   A₁ _____,   B₁ _____,   C₁ _____,   D₁ _____

MG-2.1E

   c.   Are the two figures similar? Justify your answer using proportional reasoning.