Sagamore Hills Math Tournament

Sample Test Questions and Solutions

5th Grade Concepts

1. If the tenth's digit and the tens' digit of each number are interchanged, which number will be the largest?

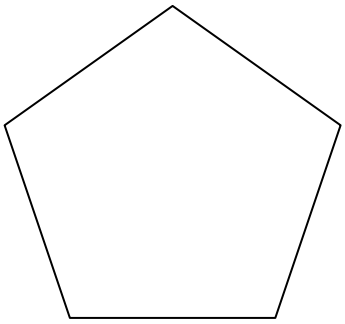
A. 89.64 B. 77.86 C. 69.76 D. 87.76

2. 3/P X 4/9 = 1/3

3. List all prime factors of 90.

4. Write the next two numbers in this sequence: 120, 108, 96, 84, ____, ____.

5. Draw all lines of symmetry for the given regular pentagon:



Solutions:

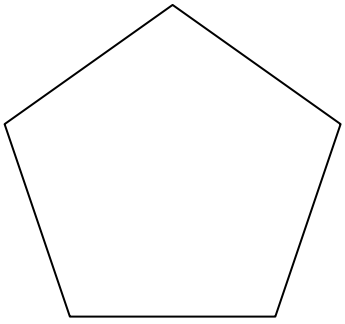
1. D. 87.76

2. P = 4

3. 2, 3, 5

4. 72, 60

5.



5th Grade Problem-Solving

1. Which package of candy bars is the best buy? (All candy bars are the exact same size.)

A. 6 bars for $2.70 B. 7 bars for $3.50 C. 8 bars for $4.80 D. 9 bars for $4.95

2. What is the largest product you can obtain by placing the digits 4, 3, 8, 2, and 5 in this array?

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X ☐ ☐

3. The sum of three consecutive prime numbers is 49. What is the largest of the primes?

4. What is the smallest whole number answer possible when you rearrange these symbols, using each exactly once?

(X -) 7 3 4

5. There are four blue socks and four white socks in a drawer. If you reach into the drawer blindfolded, what is the least number of socks you must pull out in order to be sure of getting a blue pair?

Solutions:

1. A. 6 bars for $2.70 ($.45 each)

2. 542 X 83 = 44,986

3. 19 (13 + 17 + 19 = 49)

4. 5 (3 X 4) – 7

5. 6