1. Which of the letters below is symmetric with respect to a vertical line, but is not symmetric with respect to a horizontal line?

C M S H

* 1. C B. M C. S D. H
1. Calculate $\frac{96}{16}-\frac{308}{28}$
	1. $-13\frac{1}{4}$ B. $-\frac{212}{112}$ C. -66 D. -5
2. Which of the following nets can be folded to make a cube?
	1. B.
3. D.
4. Five buckets of golf balls contain a total of 100 balls. Bucket #2 has two more golf balls than #1. Bucket #3 has two more than #2. Bucket #4 has two more than #3. Bucket #5 has two more than #4. How many balls are in Bucket #4?
	1. 22 B. 20 C. 18 D. 16
5. If 10 workers assemble 30 television sets in 8 hours, how many television sets will 40 workers assemble in 4 hours, assuming that they work at the same rate?

 A. 15 B. 32 C. 45 D. 60

1. Mrs. Taylor made a stem and leaf plot to show the high temperature for school days in December. Use the graph to determine the median for the data.

Daily High Temp, $(℉$) of School Days in December

 4 1, 2, 4, 7, 7, 8, 9

 5 4, 6, 7, 8

 6 2, 5

 7 3, 6, 7

 A. 49 B. 56 C. 54 D. 55

1. Two bicyclists met at the intersection of two straight flat roads. They left at the same time. One headed north at 27 kilometers per hour. The other headed east. Twenty minutes later they were 15 kilometers apart. How fast was the second bicyclist going?

 A. 12 Kph B. 36 Kph C. 39 Kph D. 50 Kph

1. Calculate 4150 ÷ 2150
	1. 2 B. 275 C. 4150 D. 2150
2. Which statement is not always true?
	1. Adjacent angels in a parallelogram are supplementary
	2. Vertical angels are congruent.
	3. The two acute angels formed by the diagonal at the vertex of a rhombus are complementary.
	4. The angles in a linear pair are supplementary
3. On the map shown below, the intervals all represent the same distance. The mall is 1 ½ miles from Caitlyn’s house. How far is the pool from Caitlyn’s house?

Pool

Mall

Caitlyn’s House Kph

* 1. 2 miles B. 2 ¼ miles C. 2 1/6 miles D. 2 2/3 miles
1. A new operation is defined so that A ☺ B = A2 + B. What is (3 ☺ 2) ☺ 4?
	1. 24 B. 25 C. 40 D. 123
2. A student is writing the natural numbers. He has written 846 digits. What is the last number he wrote?
	1. 159 B. 312 C. 318 D. 408
3. Evaluate: 3m + 0.02 cm equals how many millimeters
	1. 3,000.2mm B. 3,002mm C. 302mm D. 3.02mm
4. Find the largest of 3 consecutive even integers whose sum is 492.
	1. 224 B. 72 C. 166 D. 102
5. Simplify: $\frac{-\frac{4}{5}}{\frac{3}{10}}$
	1. $-\frac{6}{25}$ B. $-\frac{1}{5}$ C. $\frac{1}{15}$ D. $-\frac{8}{3}$
6. Evaluate $\frac{\left|-7+4\right|×2}{8}$
	1. $-\frac{3}{4}$ B. $-\frac{11}{4}$ C. $\frac{3}{4}$ D. $\frac{11}{4}$
7. Find the supplement of 72$°$
	1. 28$°$ B. 18$°$ C. 8$°$ D. 108$°$
8. Solve: 4n + 1.64 = 2
	1. 0.41 B. 0.09 C. 14.56 D. 9
9. Find the perimeter of this figure. The width of the rectangle is 4m. Use $π≈3.14.$ Round to the nearest tenth.
	1. 79.25m B. 33.7m C. 28.2m D. 49.4m

5 m

1. Multiply. Write the product in scientific notation. (3.6 x 10-4)(9 x 108)
	1. 32.4 x 1012 B. 32.4 x 104 C. 3.24 x 105 D. 3.24 x 10-32
2. Simply: $2x(x-1)-\sqrt{4x^{4}}$
	1. 0 B. $2x^{2}-2x^{4}-1$ C. - 1 D. -2x
3. Find the sum of the mean and the mode for this group of numbers: 24, 42, 65, 42, 8, 17
	1. 9 B. 98 C. 41 D. 50
4. Seventy-two is four-fifths of what number?
	1. 18 B. 90 C. 288 D. 57
5. How many ways can the letters in the word ADDITION be arranged?
	1. 40,320 B. 20, 160 C. 720 D. 10,080
6. The spinner on the right is spun one time and a coin is flipped one time. What is the probability of getting C and heads?

B

A

C

* 1. $\frac{1}{8}$B. $\frac{1}{2}$C. $\frac{1}{4}$ D. $\frac{1}{16}$

TB1 The commutative property holds true for which two operations?

TB2 Find the length of $\overbar{AB}$

5

A

B

12

TB3 Find the area of the trapezoid.

**20 cm**

**12 cm**

**15 cm**