**Brevard Public Schools Secondary Mathematics Tournament – April 12, 2014
Written Test Division 2 – Algebra 2 and Pre-Calculus**

**Answer Sheet – Please put answers only to all questions from the written test in the box provided.**

**SCHOOL \_\_\_\_KEY\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ GRADER 1 INITIAL\_\_\_\_\_\_\_\_\_\_ SCORE\_\_\_\_\_\_\_\_\_**

**SUBJECT ALGEBRA 2 & PRECALC GRADER 2 INITIAL\_\_\_\_\_\_\_\_\_\_SCORE\_\_\_\_\_\_\_\_\_\_**

 **(**If needed) **GRADER 3 INITIAL\_\_\_\_\_\_\_\_\_\_SCORE\_\_\_\_\_\_\_\_\_\_**

|  |  |  |  |
| --- | --- | --- | --- |
| **1.** | (R ▫ S)(20,500) by $200 | **7.** |  ≈ 444.1 feet (rounded) |
| **2.** |  $\frac{12}{17}$ | **8.** |  1st: 36 30th : 2124 |
| **3.** |  –256 | **9.** |  ±1 |
| **4.** |  1287 | **10.** |  $\frac{3+ \sqrt{3}}{3} OR 1+ \frac{\sqrt{3}}{3}$ (simplest radical form) |
| **5.** |  850 km/h | **11.** |  9 |
| **6.** | Equation: h = 9 sin$ \frac{2π}{7}t$ + 46 .  | **12.** |  $1020 |
| **13.** |  1st: Cheryl 2nd: Richard 3rd: Derek |
| **14.** |  5 + $\sqrt{19}$ (exact) |
| **15.** |  2 |
|  |  |  |  |
| **16.** |  $\frac{5\sqrt{2}}{2}$ (exact simplified) | **21.** |  –24  |
| **17.** |  85$ \frac{1}{3}π$ OR $\frac{256π}{3}$ (exact) | **22.** |  8 in. |
| **18.** |  4 | **23.** |  2 |
| **19.** | $-\frac{33}{5}- \frac{119}{5}i OR -6.6-23.8i$  | **24.** |  0.48 gallons OR 0.5 gallons |
| **20.** |  14 m |  |  |