**Math 8 Unit 1 – Hand in #1**

1. Which of the following are perfect squares?

**64 100 73 75 81 1 16**

1. A square floor mat in a gym has a measurement of 125m2. What are the height and width of the mat to the nearest tenth?
2. Calculate.
3. 3.52 b) 152
4. 172 d) 20.22
5. What is the prime factorization of 36?
6. A square grid has a length and width of 20cm. What is the area of the grid?
7. Calculate and round to the nearest tenth.
8. $\sqrt{35}$b) $\sqrt{71}$
9. $\sqrt{25}$ d) $\sqrt{243}$
10. Mrs. Dewacht told her students’ to run around the perimeter of the school field. The area of the square field is 28 700 m2. What distance did the students run?
11. In Japanese tea rooms the floors are usually covered with square and rectangular tatami mats. The area of a half mat is 8100 cm2 and is half the size of a full mat.
12. What is the measure of the length(s) of the half mat?
13. What are the dimensions of the full mat?
14. What is the total area covered by the tatami mats?