Multiplying Radicals Worksheet

Using the given information, find the area of the following building and town squares: (Don't forget to label your answer in **square** units.)

1. St. Peter's Basilica in Vatican City
   St. Peter's is the most renowned work
   of Renaissance architecture and the
   largest church in the world. St.
   Peter's is regarded as one of the
   holiest Catholic shrines. Catholic
   tradition holds that the basilica
   is the burial site of Saint Peter, chief among Jesus's apostles and also the
   first Bishop of Rome.

   Dimensions: $6\sqrt{961}$ m on both sides

   Area of St. Peter's: _____

2. Zocalo in Mexico City, Mexico

   in

   The **Zócalo** (Spanish
   pronunciation: ['so.ka.lo]) is the
   common name of the main
   square in central Mexico City.
   Prior to the colonial period, it
   was the main ceremonial center
   the Aztec city of Tenochtitlan.

Dimensions: 16√225 m on each side

Area of Zocalo: _____

3. Grand Place in Brussels, Belgium

The **Grand Place** ("Grand Square" also used in English) is the central square of Brussels. It is surrounded by

opulent guildhalls and two larger edifices, the city's Town Hall, and the *King's House* or *Breadhouse* (French: *Maison du Roi*, Dutch: *Broodhuis*) building containing the Museum of the City of Brussels. Every two years in August, an enormous *flower carpet* is set up in the Grand Place for a few days. A million colorful begonias are set up in patterns, and the display covers a full 24 by 77 meters (79 by 253 ft), for area total of 1,800 m² (19,000 sq ft).

Dimensions: $4\sqrt{289}m \times 10\sqrt{121}$

Area of Grand Place: _____

4. Tiananmen Square in Beijing, China

Tiananmen Square or **Tian'anmen Square** is a city square in the centre of Beijing, China, named after the Tiananmen ("Gate of Heavenly Peace") located to its north, separating it from the Forbidden City. The square contains the Monument to the People's Heroes, the Great Hall of the People, the National

Museum of China, and the Mausoleum of Mao Zedong. In 1989, it was the scene of student protests, which the Chinese government put down militarily.

Dimensions: $32\sqrt{625} \, m \times 20\sqrt{625} m$

Area of Tiananmen Square: _____

5. Red Square in Moscow, Russia

Red Square is a city square in Moscow, Russia. It separates the Kremlin, the former royal citadel and now the official residence of the President of Russia, from a historic merchant quarter known as Kitai-gorod. Red Square is often considered to be the central square of Moscow since the city's major streets, which connect to Russia's major highways, originate in the square.

Dimensions: $2\sqrt{225}m \times 14\sqrt{25}m$

Area of Red Square: _____