1051-18-100   **David A. Jordan*** (`djordan@math.mit.edu`), Department of Mathematics, MIT, Bldg 2 Rm 2-236, Cambridge, MA 02139, and **Eric Larson**. *Fusion categories of dimension pq^2, and $\mathbb{Z}/3\mathbb{Z}$-graded Tambara-Yamagami categories.*

We completely classify fusion categories of dimension pq^2; in particular, we construct new examples of integral, non-group theoretical fusion categories of dimension pq^2. We also classify $\mathbb{Z}/3\mathbb{Z}$-graded Tambara-Yamagami categories. Our results are based on recent work of Etingof, Nikshych, and Ostrik on extensions of fusion categories. (Received August 18, 2009)