Problems of the Week # 3

Name:_____   Date:_____

Circle the one best answer. Justify your answer by showing all work below.

11. What is the value of the median of the set of data $\{2,2,8,7,2,2,3\}$?

    A. 3.71   B. 7   C. 3   D. 3.52   E. 2

12. Simplify this complex fraction: $\dfrac{\dfrac{2}{x}+\dfrac{5}{y}}{\dfrac{2}{x}-\dfrac{5}{y}}$

    A. $\dfrac{2y+5x}{2y-5x}$ B. $\dfrac{4}{xy}$ C. $-\dfrac{7}{3xy}$ D. $\dfrac{2y+5x}{x^2+y^2}$ E. -1

13. Simplify this expression: $\dfrac{1}{2}\sqrt{112}-\sqrt{28}+2\sqrt{63}$

    A. $4\sqrt{7}$ B. $6\sqrt{7}$ C. $7\sqrt{7}$ D. $8\sqrt{7}$ E. $10\sqrt{7}$

14. The graph of $x^2+y^2=25$ and the graph of $x-4=0$ are drawn on the same set of axes. A point of intersection of the graphs is:

    A. $(5,0)$ B. $(-4,-3)$ C. $(4,-3)$ D. $(-3,4)$ E. $(4,-4)$

15. When $x=2$, find the value of the expression: $\dfrac{-3|x-2|}{4}$

    A. 3   B. 0   C. $-\dfrac{3}{4}$ D. -3 E. None of these.