**AP Psychology - Statistics Worksheet**

Borrowed from AP Psych Teachers’ Facebook Group

1. The four houses of Hogwarts recently took an AP Psychology exam. Use these data to determine important statistics to the nearest hundredth.

|  |  |  |  |
| --- | --- | --- | --- |
| Ravenclaw | Hufflepuff | Slytherin | Gryffindor |
| 52 | 44 | 44 | 42 |
| 50 | 42 | 38 | 48 |
| 50 | 54 | 46 | 42 |
| 56 | 28 | 38 | 38 |
| 40 | 50 | 44 | 40 |
| 46 | 42 | 52 | 46 |
| 36 | 42 | 32 | 46 |
| 54 | 34 | 48 | 34 |
| 46 | 32 | 44 | 48 |
| 50 | 50 | 30 | 44 |
| 40 | 32 | 30 | 46 |
| 36 | 56 | 58 | 50 |
| 42 | 40 | 54 | 40 |
| 56 | 50 | 46 | 48 |
| 50 | 54 | 40 | 46 |
| 38 | 32 | 36 | 22 |
| 52 | 38 | 42 | 58 |
| 52 | 44 | 40 | 48 |
| 46 | 36 | 44 | 42 |
| 44 | 34 | 44 | 56 |
| 44 | 56 |  | 54 |
| 42 | 46 |  | 46 |
| 42 | 42 |  | 48 |
| 46 |  |  | 46 |

* 1. Measures of Central Tendency
     1. Mean
        1. Ravenclaw
        2. Hufflepuff
        3. Slytherin
        4. Gryffindor
     2. Median
        1. Ravenclaw
        2. Hufflepuff
        3. Slytherin
        4. Gryffindor
     3. Mode
        1. Ravenclaw
        2. Hufflepuff
        3. Slytherin
        4. Gryffindor
  2. Measures of Variability
     1. Range
        1. ‘Ravenclaw
        2. Hufflepuff
        3. Slytherin
        4. Gryffindor
     2. Standard Deviation
        1. Ravenclaw
        2. Hufflepuff
        3. Slytherin
        4. Gryffindor
  3. Pick a House and make a histogram with the following categories (0-30; 31-35; 36-40; 41-45; 46-50; 51-55; 56-60). Be sure to label the axes

1. Is the distribution skewed or normal? What does that mean? Is it a “good” skew?
2. Based on the data from the Houses of Hogwarts, list four potential research studies where test scores could be a dependent variable.
3. Based on these data, write a brief paragraph on which House would you prefer to be in and why (again, using data)? DO ON YOUR OWN PAPER AND STAPLE.