|  |  |  |  |
| --- | --- | --- | --- |
| **Investigating Perfect Squares and Square Roots** | | | |
| Uses exponential notation to show factors of a number  25 = 5 × 5  = 52 | Identifies a perfect square and a non-perfect square  64 = 8 × 8  = 82  64 is a perfect square because it can be written as the product of two equal integers factors  63 = 3 × 3 × 7  = 32 × 7  63 is not a perfect square because it cannot be written as the product of two equal integer factors. There is a single prime factor of 7 leftover | Determines the square root of a perfect square  144 = 2 × 2 × 2 × 2 × 3 × 3  = 2 × 2 × 3 × 2 × 2 × 3  = 12 × 12  = 12 | Estimates the square root of a non-perfect square  I know that = 9 and = 10, so I estimate that is approximately 9.5 because 90 is about halfway between 81 and 100. |
| **Observations/Documentation** | | | |
|  |  |  |  |