68 Justine says that if you square any given value of x, the square of x will always be greater than the value of x. State whether you agree or disagree with Justine's claim. If you disagree, write a counterexample. [2]

69 Find $7x^3y(-4x^3 - xy + 2y)$. [1]

70 Use the Quadratic Formula to solve $2x^2 - 8x - 6 = 0$. Round to the nearest tenth, if necessary. Show the steps you used to solve the problem. [3]

71 Determine whether the data in the table below display exponential behavior. Explain your reasoning. [3]

x	3	6	9	12	15
y	2	3	4.5	6.75	10.125

68 Justine says that if you square any given value of x, the square of x will always be greater than the value of x. State whether you agree or disagree with Justine's claim. If you disagree, write a counterexample. [2] **I.C.5.**

Disagree; sample answer: If x is $\frac{1}{8}$ and you square $\frac{1}{8}$, the result is $\frac{1}{64}$. Since $\frac{1}{64}$ is less than $\frac{1}{8}$, Justine's statement is false.

69 Find $7x^3y(-4x^3 - xy + 2y)$. [1] **I.D.2.**

$-28x^6y - 7x^4y^2 + 14x^3y^2$

70 Use the Quadratic Formula to solve $2x^2 - 8x - 6 = 0$. Round to the nearest tenth, if necessary. Show the steps you used to solve the problem. [3] **III.A.5.**

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{8 \pm \sqrt{(-8)^2 - 4(2)(-6)}}{2(2)}$$

$$= \frac{8 \pm \sqrt{64 - (-48)}}{4} \text{ or } \frac{8 \pm \sqrt{112}}{4} \text{ or } \frac{8 \pm 4\sqrt{7}}{4} \text{ or } 2 \pm \sqrt{7}$$

$$= 2 + \sqrt{7} \text{ or } \approx 4.6$$

$$= 2 - \sqrt{7} \text{ or } \approx -0.6$$

71 Determine whether the data in the table below display exponential behavior. Explain your reasoning. [3] **III.B.3.**

x	3	6	9	12	15
y	2	3	4.5	6.75	10.125

Yes; sample answer: The domain values are at regular intervals and the range values have a common factor of 1.5. This means that the data are probably exponential.