



Name: _____

Date: _____

Algebra 1 – Unit 1 – Evaluating an Expression (Challenge)

1. Evaluate $2x^2 + 2y^2$ when $x = 4$, $y = 5$. Evaluate $2x^2 + 4y^2$ when $x = 5$, $y = 7$.

2. Evaluate $2x + 3y - 4z$ when $x = 7$, $y = 9$, $z = 1$. Evaluate $2x + 5y - 5z$ when $x = 7$, $y = 9$, $z = 1$.

3. Evaluate $3x^2 + 4y^2$ when $x = 8$, $y = 7$. Evaluate $1x^2 + 4y^2$ when $x = 3$, $y = 9$.

4. Evaluate $\frac{2x + y + 6}{4}$ when $x = 5$, $y = 4$. Evaluate $1x^2 + 2y^2$ when $x = 2$, $y = 9$.

5. Evaluate $2x + 4y - 5z$ when $x = 10$, $y = 2$, $z = 4$. Evaluate $1x^2 + 3y^2$ when $x = 4$, $y = 9$.



Algebra 1 – Unit 1 – Evaluating an Expression (Challenge) – Answer Key

1. Evaluate $2x^2 + 2y^2$ when $x = 4$, $y = 5$. Evaluate $2x^2 + 4y^2$ when $x = 5$, $y = 4$.
 $x = 82$ $x = 150$

2. Evaluate $2x + 3y - 4z$ when $x = 7$, $y = 8$, $z = 1$. Evaluate $2x + 5y - 5z$ when $x = 7$, $y = 8$, $z = 1$.
 $x = 14$ $x = 9$

3. Evaluate $3x^2 + 4y^2$ when $x = 4$, $y = 3$. Evaluate $1x^2 + 4y^2$ when $x = 3$, $y = 4$.
 $x = 48$ $x = 25$

4. Evaluate $\frac{2x + y + 6}{4}$ when $x = 5$, $y = 4$. Evaluate $1x^2 + 2y^2$ when $x = 2$, $y = 4$.
 $x = 5$ $x = 22$

5. Evaluate $2x + 4y - 5z$ when $x = 1$, $y = 2$, $z = 4$. Evaluate $1x^2 + 3y^2$ when $x = 4$, $y = 3$.
 $x = 12$ $x = 43$