



Name: _____

Date: _____

Fresh
Math

Algebra 1 – Unit 1 – Substitution of Variables (Hard)

1. $7x + 3y$ when $x = 6$, $y = 4$

2. $2x^2 + 2x$ when $x = 7$

or

$4x^2 + 5x$ when $x = 6$

3. $4x + 3y$ when $x = 8$, $y = 2$

4. $6x + 7y$ when $x = 9$, $y = 5$

or

$\frac{2x + 32}{4}$ when $x = 9$

5. $5x^2 + 2x$ when $x = 10$

or

$7x + 3y$ when $x = 9$, $y = 6$



Algebra 1 – Unit 1 – Substitution of Variables (Hard) – Answer Key

1. text{Substitute: } $7x + 3y$ text{ when } $x = 6$, text{Substitute: } $1x^2 + 5x$ text{ when } $x = 4$
 $x = 67$ $x = 36$

2. text{Substitute: } $2x^2 + 2x$ text{ when } $x = 7$, text{Substitute: } $4x^2 + 5x$ text{ when } $x = 6$
 $x = 60$ $x = 174$

3. text{Substitute: } $4x + 3y$ text{ when } $x = 9$, text{Substitute: } $2x^2 + 3x$ text{ when } $x = 2$
 $x = 63$ $x = 14$

4. text{Substitute: } $6x + 7y$ text{ when } $x = 9$, text{Substitute: } $\frac{2x + 32}{4}$ text{ when } $x = 5$
 $x = 89$ $x = 11$

5. text{Substitute: } $5x^2 + 2x$ text{ when } $x = 10$, text{Substitute: } $7x + 3y$ text{ when } $x = 9$, $y = 2$
 $x = 192$ $x = 72$