



Name: _____

Date: _____

Algebra 1 – Unit 2 – Equations (Challenge)

1. If $x = 4$ makes $4x + 5 = 4x + ?$ true, find ?
2. If $5a + 4b = 32$ and $a = 4$, find b
3. If $x = 4$ makes $3x + 6 = 2x + ?$ true, find ?
4. If $3x + 6 = 15$, subtract what from both sides to get $3x = 9$?
5. If $x = 9$ makes $5x + 4 = 5x + ?$ true, find ?
6. If $4a + 3b = 14$ and $a = 2$, find b
7. If $x = 12$ makes $3x + 3 = 2x + ?$ true, find ?
8. If $2a + 4b = 32$ and $a = 2$, find b
9. If $3x + 9 = 33$, subtract what from both sides to get $3x = 24$?
10. If $2x + 5 = 11$, subtract what from both sides to get $2x = 6$?



Algebra 1 – Unit 2 – Equations (Challenge) – Answer Key

1. If $x = 4$ makes $4x + 5 = 4x + ?$ true, find ?

x = 5

6. If $4a + 3b = 14$ and $a = 2$, find b

x = 2

2. If $5a + 4b = 32$ and $a = 4$, find b

x = 3

7. If $x = 12$ makes $3x + 3 = 2x + ?$ true, find ?

x = 15

3. If $x = 4$ makes $3x + 6 = 2x + ?$ true, find ?

x = 10

8. If $2a + 4b = 32$ and $a = 2$, find b

x = 7

4. If $3x + 6 = 15$, subtract what from both sides to get $3x = 9$?

x = 6

9. If $3x + 9 = 33$, subtract what from both sides to get $3x = 24$?

x = 9

5. If $x = 9$ makes $5x + 4 = 5x + ?$ true, find ?

x = 4

10. If $2x + 5 = 11$, subtract what from both sides to get $2x = 6$?

x = 5