



Name: _____

Date: _____

Algebra 1 – Unit 2 – Equations (Challenge)

1. If $x = 4$ makes $4x + 5 = 4x + ?$ true, find ?
2. If $5a + 4b = 32$ text{ and } $a = 4$, text{ 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 $4a + 3b = 14$ text{ and } $a = 2$, text{ find } b
7. If $x = 12$ makes $3x + 3 = 2x + ?$ true, find ?
8. If $2a + 4b = 32$ text{ and } $a = 2$, text{ 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 $2x = 6$?

$$x = 5$$