Unknown Symbols in Equations (E)

Name: _____ Date: _____

Determine the value of each symbol.

1. $21 = 5 + \heartsuit$
2. $11 + 8 = \triangle$
3. $\diamondsuit = 19 + 11$
4. $\blacksquare + 2 = 3$
5. $7 + \blacktriangledown = 18$
6. $7 + \S = 18$
7. $19 = \dagger + 10$
8. $\bullet = 6 + 1$
9. $\Cup + 13 = 20$
10. $\oplus + 10 = 13$
11. $9 + 14 = \measuredangle$
12. $\otimes = 17 + 6$
13. $\spadesuit + 6 = 11$
14. $24 = 10 + \varnothing$
15. $11 + \odot = 20$
16. $17 + \blacklozenge = 32$
17. $\bigstar = 15 + 3$
18. $18 = \natural + 10$
19. $19 + \sharp = 23$
20. $\clubsuit + 11 = 13$

Unknown Symbols in Equations (E) Answers

Name: _____ Date: _____

Determine the value of each symbol.

1. $21 = 5 + \heartsuit$
   $\heartsuit = 16$

2. $11 + 8 = \triangle$
   $\triangle = 19$

3. $\diamondsuit = 19 + 11$
   $\diamondsuit = 30$

4. $\blacksquare + 2 = 3$
   $\blacksquare = 1$

5. $7 + \blacktriangledown = 18$
   $\blacktriangledown = 11$

6. $7 + \S = 18$
   $\S = 11$

7. $19 = \dagger + 10$
   $\dagger = 9$

8. $\bullet = 6 + 1$
   $\bullet = 7$

9. $\Cup + 13 = 20$
   $\Cup = 7$

10. $\oplus + 10 = 13$
    $\oplus = 3$

11. $9 + 14 = \measuredangle$
    $\measuredangle = 23$

12. $\otimes = 17 + 6$
    $\otimes = 23$

13. $\spadesuit + 6 = 11$
    $\spadesuit = 5$

14. $24 = 10 + \varnothing$
    $\varnothing = 14$

15. $11 + \odot = 20$
    $\odot = 9$

16. $17 + \blacklozenge = 32$
    $\blacklozenge = 15$

17. $\bigstar = 15 + 3$
    $\bigstar = 18$

18. $18 = \natural + 10$
    $\natural = 8$

19. $19 + \sharp = 23$
    $\sharp = 4$

20. $\clubsuit + 11 = 13$
    $\clubsuit = 2$