

Unknown Symbols in Equations (A)

Name: _____

Date: _____

Determine the value of each symbol.

1. $\dagger \times 3 = 15$

2. $36 = 4 \times \sphericalangle$

3. $\emptyset \times 7 = 56$

4. $6 \times \diamond = 30$

5. $18 = \dagger \times 9$

6. $21 = \blacklozenge \times 3$

7. $3 \times 9 = \#$

8. $\blacktriangledown \times 3 = 21$

9. $2 \times \cup = 8$

10. $32 = \blacksquare \times 4$

11. $30 = 6 \times \star$

12. $\odot \times 2 = 14$

13. $7 \times \bullet = 42$

14. $\S \times 9 = 81$

15. $64 = 8 \times \clubsuit$

16. $49 = \triangle \times 7$

17. $9 \times 9 = \spadesuit$

18. $27 = \oplus \times 3$

19. $24 = 4 \times \otimes$

20. $2 \times 6 = \heartsuit$

Unknown Symbols in Equations (A) Answers

Name: _____

Date: _____

Determine the value of each symbol.

1. $\dagger \times 3 = 15$

$\dagger = 5$

2. $36 = 4 \times \sphericalangle$

$\sphericalangle = 9$

3. $\emptyset \times 7 = 56$

$\emptyset = 8$

4. $6 \times \diamond = 30$

$\diamond = 5$

5. $18 = \spadesuit \times 9$

$\spadesuit = 2$

6. $21 = \blacklozenge \times 3$

$\blacklozenge = 7$

7. $3 \times 9 = \#$

$\# = 27$

8. $\blacktriangledown \times 3 = 21$

$\blacktriangledown = 7$

9. $2 \times \cup = 8$

$\cup = 4$

10. $32 = \blacksquare \times 4$

$\blacksquare = 8$

11. $30 = 6 \times \star$

$\star = 5$

12. $\odot \times 2 = 14$

$\odot = 7$

13. $7 \times \bullet = 42$

$\bullet = 6$

14. $\S \times 9 = 81$

$\S = 9$

15. $64 = 8 \times \clubsuit$

$\clubsuit = 8$

16. $49 = \triangle \times 7$

$\triangle = 7$

17. $9 \times 9 = \spadesuit$

$\spadesuit = 81$

18. $27 = \oplus \times 3$

$\oplus = 9$

19. $24 = 4 \times \otimes$

$\otimes = 6$

20. $2 \times 6 = \heartsuit$

$\heartsuit = 12$

Unknown Symbols in Equations (B)

Name: _____

Date: _____

Determine the value of each symbol.

1. $\xi = 1 \times 7$

2. $4 \times 5 = \blacksquare$

3. $4 \times 1 = \star$

4. $9 \times 7 = \blacklozenge$

5. $54 = \dagger \times 9$

6. $\ddagger \times 9 = 27$

7. $7 \times 4 = \odot$

8. $42 = 6 \times \emptyset$

9. $56 = 8 \times \clubsuit$

10. $\spadesuit \times 1 = 1$

11. $\# \times 5 = 45$

12. $5 \times \mathbb{U} = 30$

13. $18 = \bullet \times 2$

14. $48 = 6 \times \otimes$

15. $5 = \diamond \times 5$

16. $32 = 8 \times \sphericalangle$

17. $\oplus \times 7 = 14$

18. $\blacktriangledown = 3 \times 8$

19. $6 \times 8 = \triangle$

20. $\heartsuit \times 2 = 14$

Unknown Symbols in Equations (B) Answers

Name: _____

Date: _____

Determine the value of each symbol.

1. $\xi = 1 \times 7$

$\xi = 7$

2. $4 \times 5 = \blacksquare$

$\blacksquare = 20$

3. $4 \times 1 = \star$

$\star = 4$

4. $9 \times 7 = \blacklozenge$

$\blacklozenge = 63$

5. $54 = \dagger \times 9$

$\dagger = 6$

6. $\ddagger \times 9 = 27$

$\ddagger = 3$

7. $7 \times 4 = \odot$

$\odot = 28$

8. $42 = 6 \times \emptyset$

$\emptyset = 7$

9. $56 = 8 \times \clubsuit$

$\clubsuit = 7$

10. $\spadesuit \times 1 = 1$

$\spadesuit = 1$

11. $\# \times 5 = 45$

$\# = 9$

12. $5 \times \mathbb{U} = 30$

$\mathbb{U} = 6$

13. $18 = \bullet \times 2$

$\bullet = 9$

14. $48 = 6 \times \otimes$

$\otimes = 8$

15. $5 = \diamond \times 5$

$\diamond = 1$

16. $32 = 8 \times \sphericalangle$

$\sphericalangle = 4$

17. $\oplus \times 7 = 14$

$\oplus = 2$

18. $\blacktriangledown = 3 \times 8$

$\blacktriangledown = 24$

19. $6 \times 8 = \triangle$

$\triangle = 48$

20. $\heartsuit \times 2 = 14$

$\heartsuit = 7$

Unknown Symbols in Equations (C)

Name: _____

Date: _____

Determine the value of each symbol.

1. $81 = 9 \times \cup$

2. $54 = 6 \times \blacklozenge$

3. $7 \times 8 = \dagger$

4. $\dagger \times 3 = 15$

5. $5 \times \blacksquare = 40$

6. $6 = 2 \times \bullet$

7. $9 \times \sphericalangle = 72$

8. $\diamond = 3 \times 7$

9. $8 \times 3 = \emptyset$

10. $9 \times 9 = \clubsuit$

11. $4 \times 1 = \spadesuit$

12. $27 = \otimes \times 3$

13. $\star \times 5 = 15$

14. $\odot = 5 \times 7$

15. $5 \times \triangle = 20$

16. $\blacktriangledown = 2 \times 4$

17. $\ddagger \times 4 = 24$

18. $\heartsuit \times 9 = 72$

19. $1 \times \oplus = 3$

20. $6 \times \S = 18$

Unknown Symbols in Equations (C) Answers

Name: _____

Date: _____

Determine the value of each symbol.

1. $81 = 9 \times \Psi$

$\Psi = 9$

2. $54 = 6 \times \blacklozenge$

$\blacklozenge = 9$

3. $7 \times 8 = \ddagger$

$\ddagger = 56$

4. $\dagger \times 3 = 15$

$\dagger = 5$

5. $5 \times \blacksquare = 40$

$\blacksquare = 8$

6. $6 = 2 \times \bullet$

$\bullet = 3$

7. $9 \times \sphericalangle = 72$

$\sphericalangle = 8$

8. $\diamond = 3 \times 7$

$\diamond = 21$

9. $8 \times 3 = \emptyset$

$\emptyset = 24$

10. $9 \times 9 = \clubsuit$

$\clubsuit = 81$

11. $4 \times 1 = \spadesuit$

$\spadesuit = 4$

12. $27 = \otimes \times 3$

$\otimes = 9$

13. $\star \times 5 = 15$

$\star = 3$

14. $\odot = 5 \times 7$

$\odot = 35$

15. $5 \times \triangle = 20$

$\triangle = 4$

16. $\blacktriangledown = 2 \times 4$

$\blacktriangledown = 8$

17. $\ddagger \times 4 = 24$

$\ddagger = 6$

18. $\heartsuit \times 9 = 72$

$\heartsuit = 8$

19. $1 \times \oplus = 3$

$\oplus = 3$

20. $6 \times \S = 18$

$\S = 3$

Unknown Symbols in Equations (D)

Name: _____

Date: _____

Determine the value of each symbol.

1. $\S \times 7 = 42$

2. $8 \times 1 = \star$

3. $\diamond \times 2 = 12$

4. $8 \times 8 = \oplus$

5. $1 \times 9 = \dagger$

6. $\triangle \times 4 = 36$

7. $\blacklozenge \times 8 = 32$

8. $\clubsuit = 2 \times 8$

9. $8 \times \odot = 16$

10. $12 = \otimes \times 4$

11. $56 = \ddagger \times 7$

12. $18 = 3 \times \spadesuit$

13. $\natural = 8 \times 1$

14. $24 = \blacksquare \times 3$

15. $\cup \times 6 = 36$

16. $\blacktriangledown = 1 \times 1$

17. $\heartsuit = 3 \times 7$

18. $\emptyset \times 7 = 28$

19. $4 \times \sphericalangle = 20$

20. $9 \times 7 = \bullet$

Unknown Symbols in Equations (D) Answers

Name: _____

Date: _____

Determine the value of each symbol.

1. $\S \times 7 = 42$

$\S = 6$

2. $8 \times 1 = \star$

$\star = 8$

3. $\diamond \times 2 = 12$

$\diamond = 6$

4. $8 \times 8 = \oplus$

$\oplus = 64$

5. $1 \times 9 = \dagger$

$\dagger = 9$

6. $\triangle \times 4 = 36$

$\triangle = 9$

7. $\blacklozenge \times 8 = 32$

$\blacklozenge = 4$

8. $\clubsuit = 2 \times 8$

$\clubsuit = 16$

9. $8 \times \odot = 16$

$\odot = 2$

10. $12 = \otimes \times 4$

$\otimes = 3$

11. $56 = \# \times 7$

$\# = 8$

12. $18 = 3 \times \spadesuit$

$\spadesuit = 6$

13. $\bigr = 8 \times 1$

$\bigr = 8$

14. $24 = \blacksquare \times 3$

$\blacksquare = 8$

15. $\mathbb{U} \times 6 = 36$

$\mathbb{U} = 6$

16. $\blacktriangledown = 1 \times 1$

$\blacktriangledown = 1$

17. $\heartsuit = 3 \times 7$

$\heartsuit = 21$

18. $\emptyset \times 7 = 28$

$\emptyset = 4$

19. $4 \times \sphericalangle = 20$

$\sphericalangle = 5$

20. $9 \times 7 = \bullet$

$\bullet = 63$

Unknown Symbols in Equations (E)

Name: _____

Date: _____

Determine the value of each symbol.

1. $3 \times \# = 21$

2. $5 \times 2 = \oplus$

3. $5 = \blacksquare \times 1$

4. $10 = 5 \times \odot$

5. $\star \times 1 = 7$

6. $1 \times \blacklozenge = 5$

7. $6 \times 2 = \spadesuit$

8. $\diamond \times 1 = 6$

9. $7 \times 7 = \sphericalangle$

10. $35 = 7 \times \cup$

11. $4 \times 1 = \heartsuit$

12. $56 = 8 \times \dagger$

13. $\otimes = 8 \times 2$

14. $\clubsuit = 7 \times 1$

15. $9 = \emptyset \times 1$

16. $3 \times \bullet = 24$

17. $3 = 3 \times \dagger$

18. $7 \times \S = 21$

19. $54 = 9 \times \triangle$

20. $\blacktriangledown = 3 \times 3$

Unknown Symbols in Equations (E) Answers

Name: _____

Date: _____

Determine the value of each symbol.

1. $3 \times \# = 21$

$\# = 7$

2. $5 \times 2 = \oplus$

$\oplus = 10$

3. $5 = \blacksquare \times 1$

$\blacksquare = 5$

4. $10 = 5 \times \odot$

$\odot = 2$

5. $\star \times 1 = 7$

$\star = 7$

6. $1 \times \blacklozenge = 5$

$\blacklozenge = 5$

7. $6 \times 2 = \spadesuit$

$\spadesuit = 12$

8. $\diamond \times 1 = 6$

$\diamond = 6$

9. $7 \times 7 = \sphericalangle$

$\sphericalangle = 49$

10. $35 = 7 \times \cup$

$\cup = 5$

11. $4 \times 1 = \heartsuit$

$\heartsuit = 4$

12. $56 = 8 \times \clubsuit$

$\clubsuit = 7$

13. $\otimes = 8 \times 2$

$\otimes = 16$

14. $\clubsuit = 7 \times 1$

$\clubsuit = 7$

15. $9 = \emptyset \times 1$

$\emptyset = 9$

16. $3 \times \bullet = 24$

$\bullet = 8$

17. $3 = 3 \times \dagger$

$\dagger = 1$

18. $7 \times \S = 21$

$\S = 3$

19. $54 = 9 \times \triangle$

$\triangle = 6$

20. $\blacktriangledown = 3 \times 3$

$\blacktriangledown = 9$

Unknown Symbols in Equations (F)

Name: _____

Date: _____

Determine the value of each symbol.

1. $5 \times \clubsuit = 15$

2. $5 \times 8 = \blacksquare$

3. $\blacklozenge \times 6 = 6$

4. $2 = \oplus \times 1$

5. $1 \times \odot = 2$

6. $\star = 8 \times 6$

7. $9 = \dagger \times 3$

8. $16 = \S \times 8$

9. $\otimes = 4 \times 4$

10. $24 = \heartsuit \times 4$

11. $28 = 4 \times \sphericalangle$

12. $\bullet = 5 \times 7$

13. $4 \times \# = 8$

14. $40 = \natural \times 5$

15. $\cup = 7 \times 4$

16. $8 \times 5 = \triangle$

17. $3 = \emptyset \times 1$

18. $6 \times \diamond = 6$

19. $8 = 8 \times \spadesuit$

20. $1 \times 7 = \blacktriangledown$

Unknown Symbols in Equations (F) Answers

Name: _____

Date: _____

Determine the value of each symbol.

1. $5 \times \clubsuit = 15$

$\clubsuit = 3$

2. $5 \times 8 = \blacksquare$

$\blacksquare = 40$

3. $\blacklozenge \times 6 = 6$

$\blacklozenge = 1$

4. $2 = \oplus \times 1$

$\oplus = 2$

5. $1 \times \odot = 2$

$\odot = 2$

6. $\star = 8 \times 6$

$\star = 48$

7. $9 = \dagger \times 3$

$\dagger = 3$

8. $16 = \S \times 8$

$\S = 2$

9. $\otimes = 4 \times 4$

$\otimes = 16$

10. $24 = \heartsuit \times 4$

$\heartsuit = 6$

11. $28 = 4 \times \sphericalangle$

$\sphericalangle = 7$

12. $\bullet = 5 \times 7$

$\bullet = 35$

13. $4 \times \sharp = 8$

$\sharp = 2$

14. $40 = \natural \times 5$

$\natural = 8$

15. $\mathbb{U} = 7 \times 4$

$\mathbb{U} = 28$

16. $8 \times 5 = \triangle$

$\triangle = 40$

17. $3 = \emptyset \times 1$

$\emptyset = 3$

18. $6 \times \diamond = 6$

$\diamond = 1$

19. $8 = 8 \times \spadesuit$

$\spadesuit = 1$

20. $1 \times 7 = \blacktriangledown$

$\blacktriangledown = 7$

Unknown Symbols in Equations (G)

Name: _____

Date: _____

Determine the value of each symbol.

1. $4 \times 2 = \clubsuit$

2. $4 \times 8 = \dagger$

3. $12 = 6 \times \blacksquare$

4. $64 = \odot \times 8$

5. $\# = 1 \times 7$

6. $9 \times 3 = \spadesuit$

7. $1 \times 3 = \bullet$

8. $\mathbb{U} = 4 \times 5$

9. $40 = \otimes \times 8$

10. $6 \times \oplus = 30$

11. $\blacklozenge = 6 \times 1$

12. $27 = 3 \times \S$

13. $\blacktriangledown \times 2 = 2$

14. $20 = 4 \times \triangle$

15. $6 \times \emptyset = 6$

16. $5 \times \sphericalangle = 10$

17. $10 = 5 \times \star$

18. $14 = 2 \times \dagger$

19. $72 = 8 \times \heartsuit$

20. $6 \times \blacklozenge = 18$

Unknown Symbols in Equations (G) Answers

Name: _____

Date: _____

Determine the value of each symbol.

1. $4 \times 2 = \clubsuit$

$\clubsuit = 8$

2. $4 \times 8 = \dagger$

$\dagger = 32$

3. $12 = 6 \times \blacksquare$

$\blacksquare = 2$

4. $64 = \odot \times 8$

$\odot = 8$

5. $\# = 1 \times 7$

$\# = 7$

6. $9 \times 3 = \spadesuit$

$\spadesuit = 27$

7. $1 \times 3 = \bullet$

$\bullet = 3$

8. $\mathbb{U} = 4 \times 5$

$\mathbb{U} = 20$

9. $40 = \otimes \times 8$

$\otimes = 5$

10. $6 \times \oplus = 30$

$\oplus = 5$

11. $\blacklozenge = 6 \times 1$

$\blacklozenge = 6$

12. $27 = 3 \times \xi$

$\xi = 9$

13. $\blacktriangledown \times 2 = 2$

$\blacktriangledown = 1$

14. $20 = 4 \times \triangle$

$\triangle = 5$

15. $6 \times \emptyset = 6$

$\emptyset = 1$

16. $5 \times \sphericalangle = 10$

$\sphericalangle = 2$

17. $10 = 5 \times \star$

$\star = 2$

18. $14 = 2 \times \dagger$

$\dagger = 7$

19. $72 = 8 \times \heartsuit$

$\heartsuit = 9$

20. $6 \times \blacklozenge = 18$

$\blacklozenge = 3$

Unknown Symbols in Equations (H)

Name: _____

Date: _____

Determine the value of each symbol.

1. $\odot = 6 \times 9$

2. $6 \times 6 = \dagger$

3. $36 = 4 \times \clubsuit$

4. $\ddagger = 1 \times 8$

5. $\bullet \times 6 = 6$

6. $9 = \emptyset \times 3$

7. $6 \times 5 = \oplus$

8. $4 \times \diamond = 24$

9. $\star = 7 \times 1$

10. $5 \times 9 = \blacklozenge$

11. $\sphericalangle \times 7 = 14$

12. $\spadesuit \times 9 = 18$

13. $\cup \times 8 = 24$

14. $9 \times 7 = \otimes$

15. $1 \times 2 = \S$

16. $8 \times \blacksquare = 16$

17. $4 = 1 \times \ddagger$

18. $\triangle \times 5 = 5$

19. $7 \times \blacktriangledown = 21$

20. $\heartsuit = 7 \times 3$

Unknown Symbols in Equations (H) Answers

Name: _____

Date: _____

Determine the value of each symbol.

1. $\odot = 6 \times 9$

$\odot = 54$

2. $6 \times 6 = \dagger$

$\dagger = 36$

3. $36 = 4 \times \clubsuit$

$\clubsuit = 9$

4. $\spadesuit = 1 \times 8$

$\spadesuit = 8$

5. $\bullet \times 6 = 6$

$\bullet = 1$

6. $9 = \emptyset \times 3$

$\emptyset = 3$

7. $6 \times 5 = \oplus$

$\oplus = 30$

8. $4 \times \diamond = 24$

$\diamond = 6$

9. $\star = 7 \times 1$

$\star = 7$

10. $5 \times 9 = \blacklozenge$

$\blacklozenge = 45$

11. $\sphericalangle \times 7 = 14$

$\sphericalangle = 2$

12. $\spadesuit \times 9 = 18$

$\spadesuit = 2$

13. $\cup \times 8 = 24$

$\cup = 3$

14. $9 \times 7 = \otimes$

$\otimes = 63$

15. $1 \times 2 = \S$

$\S = 2$

16. $8 \times \blacksquare = 16$

$\blacksquare = 2$

17. $4 = 1 \times \sharp$

$\sharp = 4$

18. $\triangle \times 5 = 5$

$\triangle = 1$

19. $7 \times \blacktriangledown = 21$

$\blacktriangledown = 3$

20. $\heartsuit = 7 \times 3$

$\heartsuit = 21$

Unknown Symbols in Equations (I)

Name: _____

Date: _____

Determine the value of each symbol.

1. $64 = 8 \times \star$

2. $2 \times 1 = \spadesuit$

3. $1 \times 6 = \xi$

4. $5 \times \heartsuit = 15$

5. $4 \times \emptyset = 16$

6. $7 \times \diamondsuit = 63$

7. $72 = 8 \times \clubsuit$

8. $6 \times 4 = \cup$

9. $\natural \times 9 = 63$

10. $\triangle \times 8 = 48$

11. $9 \times \otimes = 27$

12. $\odot \times 3 = 6$

13. $\blacklozenge \times 9 = 63$

14. $72 = \natural \times 8$

15. $3 = 3 \times \blacktriangledown$

16. $\sphericalangle \times 7 = 14$

17. $5 \times \bullet = 5$

18. $\oplus = 6 \times 9$

19. $\dagger \times 5 = 40$

20. $8 = \blacksquare \times 1$

Unknown Symbols in Equations (I) Answers

Name: _____

Date: _____

Determine the value of each symbol.

1. $64 = 8 \times \star$

$\star = 8$

2. $2 \times 1 = \spadesuit$

$\spadesuit = 2$

3. $1 \times 6 = \xi$

$\xi = 6$

4. $5 \times \heartsuit = 15$

$\heartsuit = 3$

5. $4 \times \emptyset = 16$

$\emptyset = 4$

6. $7 \times \diamond = 63$

$\diamond = 9$

7. $72 = 8 \times \clubsuit$

$\clubsuit = 9$

8. $6 \times 4 = \cup$

$\cup = 24$

9. $\natural \times 9 = 63$

$\natural = 7$

10. $\triangle \times 8 = 48$

$\triangle = 6$

11. $9 \times \otimes = 27$

$\otimes = 3$

12. $\odot \times 3 = 6$

$\odot = 2$

13. $\blacklozenge \times 9 = 63$

$\blacklozenge = 7$

14. $72 = \sharp \times 8$

$\sharp = 9$

15. $3 = 3 \times \blacktriangledown$

$\blacktriangledown = 1$

16. $\sphericalangle \times 7 = 14$

$\sphericalangle = 2$

17. $5 \times \bullet = 5$

$\bullet = 1$

18. $\oplus = 6 \times 9$

$\oplus = 54$

19. $\dagger \times 5 = 40$

$\dagger = 8$

20. $8 = \blacksquare \times 1$

$\blacksquare = 8$

Unknown Symbols in Equations (J)

Name: _____

Date: _____

Determine the value of each symbol.

1. $64 = 8 \times \otimes$

2. $\star = 4 \times 5$

3. $28 = 4 \times \diamond$

4. $3 = \S \times 3$

5. $\sphericalangle = 8 \times 8$

6. $\bullet \times 3 = 21$

7. $6 \times \triangle = 6$

8. $72 = 8 \times \dagger$

9. $24 = 6 \times \oplus$

10. $\spadesuit = 2 \times 9$

11. $\blacktriangledown = 2 \times 8$

12. $6 = 3 \times \emptyset$

13. $9 \times \odot = 9$

14. $40 = 8 \times \blacklozenge$

15. $\blacksquare = 7 \times 3$

16. $\clubsuit = 8 \times 6$

17. $\heartsuit = 2 \times 8$

18. $3 \times \ddagger = 21$

19. $3 \times 5 = \#$

20. $\cup = 4 \times 2$

Unknown Symbols in Equations (J) Answers

Name: _____

Date: _____

Determine the value of each symbol.

1. $64 = 8 \times \otimes$

$\otimes = 8$

2. $\star = 4 \times 5$

$\star = 20$

3. $28 = 4 \times \diamond$

$\diamond = 7$

4. $3 = \S \times 3$

$\S = 1$

5. $\sphericalangle = 8 \times 8$

$\sphericalangle = 64$

6. $\bullet \times 3 = 21$

$\bullet = 7$

7. $6 \times \triangle = 6$

$\triangle = 1$

8. $72 = 8 \times \natural$

$\natural = 9$

9. $24 = 6 \times \oplus$

$\oplus = 4$

10. $\spadesuit = 2 \times 9$

$\spadesuit = 18$

11. $\blacktriangledown = 2 \times 8$

$\blacktriangledown = 16$

12. $6 = 3 \times \emptyset$

$\emptyset = 2$

13. $9 \times \odot = 9$

$\odot = 1$

14. $40 = 8 \times \blacklozenge$

$\blacklozenge = 5$

15. $\blacksquare = 7 \times 3$

$\blacksquare = 21$

16. $\clubsuit = 8 \times 6$

$\clubsuit = 48$

17. $\heartsuit = 2 \times 8$

$\heartsuit = 16$

18. $3 \times \dagger = 21$

$\dagger = 7$

19. $3 \times 5 = \sharp$

$\sharp = 15$

20. $\cup = 4 \times 2$

$\cup = 8$