

Silph Co Security Terminal

Solve the algebraic Pokeball equations to decrypt the security system and recover the stolen prototype Master Ball.

Name: _____ Date: _____

1 THE KEY

$$\begin{array}{l} \text{⚡} = 15 \quad \text{☾} = \boxed{} \quad \text{⬠} = \boxed{} \quad \text{⬡} = 11 \quad \text{▲} = 13 \\ \text{⊙} = \boxed{} \end{array}$$

Every symbol is a whole number from 1 to 20. A number in front of a shape means multiply: 2 stars = 2 x star.

2 FIND THE MISSING VALUES

Some shapes in the key are missing. Use these to work them out, in order, and write them into the key.

$$2 \text{ ⬠} + \text{▲} = 21$$

$$2 \text{ ●} + \text{⬡} = 43$$

$$\text{☾} + \text{⬠} = 11$$

3 CRACK THESE

$$1. \text{ ⚡} \times \text{☾} \times \text{⬡} = \boxed{}$$

$$2. \text{ ●} \times \text{⚡} - \text{⬡} \times \text{☾} = \boxed{}$$

CODE 1

$$3. 3 \text{ ●} + 2 \text{ ⚡} = \boxed{}$$

$$4. \text{ ⬠} + \text{⚡} \times \text{▲} = \boxed{}$$

CODE 2

$$5. \text{▲} \times \text{⬠} - \text{☾} = \boxed{}$$

$$6. 3 \text{ ☾} + 2 \text{ ⬠} = \boxed{}$$

CODE 3

$$7. \text{ ●} \div 2 + \text{⬡} = \boxed{}$$

$$8. \text{ ●} \div 2 + \text{☾} = \boxed{}$$

CODE 4

$$9. 10 \text{ ⚡} - \text{⬠} = \boxed{}$$

$$10. \text{ ☾} \times \text{⬠} - \text{⬡} = \boxed{}$$

4 THE VAULT CODE

Write the ONES digit of your answers to problems 2, 4, 6, 8 (the ones tagged CODE 1-4), in that order. That opens the prototype master ball.

Answer Key

Silph Co Security Terminal · Grade 5 Crack the Code

The key

⚡ lightning bolt = **15** 🌙 moon = **7** (hidden) ⬠ pentagon = **4** (hidden) ⬡ hexagon = **11**
 ▲ triangle = **13** ● circle = **16** (hidden)

Every symbol is a whole number from 1 to 20.

- | | | |
|-----|--|-------------|
| 1. | ⚡ × 🌙 × ⬡ (lightning bolt x moon x hexagon) | 1155 |
| 2. | ● × ⚡ - ⬡ × 🌙 (circle x lightning bolt - hexagon x moon) | 163 |
| 3. | 3● + 2⚡ (3 x circle + 2 x lightning bolt) | 78 |
| 4. | ⬠ + ⚡ × ▲ (pentagon + lightning bolt x triangle) | 199 |
| 5. | ▲ × ⬠ - 🌙 (triangle x pentagon - moon) | 45 |
| 6. | 3🌙 + 2⬠ (3 x moon + 2 x pentagon) | 29 |
| 7. | ● ÷ 2 + ⬡ (circle / 2 + hexagon) | 19 |
| 8. | ● ÷ 2 + 🌙 (circle / 2 + moon) | 15 |
| 9. | 10⚡ - ⬠ (10 x lightning bolt - pentagon) | 146 |
| 10. | 🌙 × ⬠ - ⬡ (moon x pentagon - hexagon) | 17 |

Vault code: 3995