

Redstone Door Decoder

Solve the block equations using addition and subtraction to find the four-digit passcode for the hidden vault.

Name: _____ Date: _____

1 THE KEY

$$\blacktriangle = 3 \quad \blacklightning = 7 \quad \star = 8 \quad \bullet = 5 \quad + = 10$$

Every symbol is a whole number from 1 to 10. A number in front of a shape means multiply: 2 stars = 2 x star.

2 CRACK THESE

1. $2\blacklightning + \blacktriangle = \boxed{}$

2. $3\blacktriangle = \boxed{}$

CODE 1

3. $2+ + 2\bullet = \boxed{}$

4. $+ + \star = \boxed{}$

CODE 2

5. $2\star = \boxed{}$

6. $\bullet + 2+ = \boxed{}$

CODE 3

7. $2+ + \blacklightning = \boxed{}$

8. $\blacklightning - \bullet = \boxed{}$

CODE 4

9. $\boxed{} + \blacklightning = 12$ Draw the shape: $\boxed{}$

10. $\boxed{} + + = 18$ Draw the shape: $\boxed{}$

3 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 obsidian chest holding.

Answer Key

Redstone Door Decoder · Grade 2 Crack the Code

The key

▲ triangle = 3 ⚡ lightning bolt = 7 ★ star = 8 ● circle = 5 + cross = 10

Every symbol is a whole number from 1 to 10.

- | | | |
|-----|--|--------|
| 1. | 2⚡ + ▲ (2 x lightning bolt + triangle) | 17 |
| 2. | 3▲ (3 x triangle) | 9 |
| 3. | 2+ + 2● (2 x cross + 2 x circle) | 30 |
| 4. | + + ★ (cross + star) | 18 |
| 5. | 2★ (2 x star) | 16 |
| 6. | ● + 2+ (circle + 2 x cross) | 25 |
| 7. | 2+ + ⚡ (2 x cross + lightning bolt) | 27 |
| 8. | ⚡ - ● (lightning bolt - circle) | 2 |
| 9. | □ + ⚡ = 12 (? + lightning bolt) | circle |
| 10. | □ + + = 18 (? + cross) | star |

Vault code: **9 8 5 2**