



Crack the Vault Code

Someone locked the vault with a 4-digit code. Work out what each shape is worth and crack it.

Name: _____ Date: _____

1 THE KEY

$$\text{Crescent Moon} = 4 \quad \text{Solid Circle} = 1 \quad \text{Solid Triangle} = 7 \quad \text{Plus Sign} = 10 \quad \text{Star} = 5$$

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. $++\text{Crescent Moon}-\text{Solid Triangle} = \boxed{}$

2. $3\text{Solid Triangle} = \boxed{}$

CODE 1

3. $3\text{Solid Circle} = \boxed{}$

4. $3++-\text{Star} = \boxed{}$

CODE 2

5. $2\text{Crescent Moon}+2+= \boxed{}$

6. $\text{Crescent Moon}++= \boxed{}$

CODE 3

7. $++2\text{Solid Circle}= \boxed{}$

8. $2\text{Crescent Moon}-\text{Star}= \boxed{}$

CODE 4

9. $\text{Solid Circle} + \boxed{} = 6$ Draw the shape:

10. $\boxed{} + \text{Star} = 12$ Draw the shape:

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 vault.

Answer Key

Crack the Vault Code · Grade 2 Crack the Code

The key

☾ moon = 4 ● circle = 1 ▲ triangle = 7 + cross = 10 ★ star = 5

Every symbol is a whole number from 1 to 10.

1. $+ + ☾ - ▲$ (cross + moon - triangle) 7
2. $3▲$ (3 x triangle) 21
3. $3●$ (3 x circle) 3
4. $3+ - ★$ (3 x cross - star) 25
5. $2☾ + 2+$ (2 x moon + 2 x cross) 28
6. $☾ + +$ (moon + cross) 14
7. $+ + 2●$ (cross + 2 x circle) 12
8. $2☾ - ★$ (2 x moon - star) 3
9. $● + \square = 6$ (circle + ?) star
10. $\square + ★ = 12$ (? + star) triangle

Vault code: **1 5 4 3**