

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

$$+ = 5 \quad \blacktriangle = 2 \quad \bigcirc = 8 \quad \heartsuit = 7 \quad \blacklozenge = 9$$

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. $2\blacklozenge - \heartsuit = \square$

2. $\heartsuit + \blacktriangle = \square$

CODE 1

3. $2\blacktriangle + 2+ = \square$

4. $\blacklozenge + \blacktriangle - \bigcirc = \square$

CODE 2

5. $2\heartsuit + 2+ = \square$

6. $3\blacklozenge = \square$

CODE 3

7. $2\blacklozenge = \square$

8. $3+ - \blacktriangle = \square$

CODE 4

9. $\square + \blacklozenge = 11$ Draw the shape: $\square$

10. $\blacktriangle + \square = 10$ Draw the shape: $\square$

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

 cross = 5
  triangle = 2
  ring = 8
  heart = 7
  pentagon = 9

Every symbol is a whole number from 1 to 10.

1. $2 \times \text{pentagon} - \text{heart}$ (2 x pentagon - heart) 11
2. $\text{heart} + \text{triangle}$ (heart + triangle) 9
3. $2 \times \text{triangle} + 2 \times \text{cross}$ (2 x triangle + 2 x cross) 14
4. $\text{pentagon} + \text{triangle} - \text{ring}$ (pentagon + triangle - ring) 3
5. $2 \times \text{heart} + 2 \times \text{cross}$ (2 x heart + 2 x cross) 24
6. $3 \times \text{pentagon}$ (3 x pentagon) 27
7. $2 \times \text{pentagon}$ (2 x pentagon) 18
8. $3 \times \text{cross} - \text{triangle}$ (3 x cross - triangle) 13
9. $\square + \text{pentagon} = 11$ (? + pentagon) triangle
10. $\text{triangle} + \square = 10$ (triangle + ?) ring

Vault code: 9 3 7 3