

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 $\blacktriangle$ = 2 $\bigcirc$ = 8 $\heartsuit$ = 7 $\blacklozenge$ = 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. $2\blacklozenge - \heartsuit = \boxed{}$

2. $\heartsuit + \blacktriangle = \boxed{}$

CODE 1

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

4. $\blacklozenge + \blacktriangle - \bigcirc = \boxed{}$

CODE 2

5. $2\heartsuit + 2+ = \boxed{}$

6. $3\blacklozenge = \boxed{}$

CODE 3

7. $2\blacklozenge = \boxed{}$

8. $3+ - \blacktriangle = \boxed{}$

CODE 4

9. $\boxed{} + \blacklozenge = 11$ Draw the shape: $\boxed{}$

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

Vault code: 9 3 7 3