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



Every symbol is a whole number from 1 to 15. 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.







3 CRACK THESE

1. ○ × ♥ ÷ ▲ = ☐

2. 3■ + 2♥ = ☐ CODE 1

3. ■ × ⚡ = ☐

4. ⬟ × ♥ + ■ = ☐ CODE 2

5. 3■ + 2⬟ = ☐

6. ▲ × ⬟ + ○ = ☐ CODE 3

7. 100○ + ⚡ = ☐

8. (■ + ▲) × ○ = ☐ CODE 4

9. 10■ - ♥ = ☐

10. 10⬟ - ○ = ☐

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 vault.

TEACHER / PARENT

Answer Key

Crack the Vault Code · Grade 4 Crack the Code

The key

■ square = **11** (hidden) ▲ triangle = **3** ♥ heart = **6** ⬟ pentagon = **9** (hidden)

ϟ lightning bolt = **10** (hidden) ○ ring = **14**

Every symbol is a whole number from 1 to 15.

1.	○ × ♥ ÷ ▲ (ring x heart / triangle)	**28**
2.	**3**■ + **2**♥ (3 x square + 2 x heart)	**45**
3.	■ × ϟ (square x lightning bolt)	**110**
4.	⬟ × ♥ + ■ (pentagon x heart + square)	**65**
5.	**3**■ + **2**⬟ (3 x square + 2 x pentagon)	**51**
6.	▲ × ⬟ + ○ (triangle x pentagon + ring)	**41**
7.	**100**○ + ϟ (100 x ring + lightning bolt)	**1410**
8.	**(** ■ + ▲ **)** × ○ ((square + triangle) x ring)	**196**
9.	**10**■ - ♥ (10 x square - heart)	**104**
10.	**10**⬟ - ○ (10 x pentagon - ring)	**76**

Vault code: **5 5 1 6**