

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

$$\begin{array}{ccccc} \text{Hexagon} & = & 2 & \text{Circle} & = & 7 & \text{Triangle} & = & 5 & \text{Pentagon} & = & 4 & \text{Star} & = & 10 \end{array}$$

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. $\text{Pentagon} + 2 \times \text{Circle} = \boxed{}$

2. $2 \times \text{Circle} - \text{Hexagon} = \boxed{}$

CODE 1

3. $\text{Star} - \text{Circle} = \boxed{}$

4. $2 \times \text{Triangle} + \text{Star} = \boxed{}$

CODE 2

5. $\text{Star} + \text{Circle} + \text{Triangle} = \boxed{}$

6. $2 \times \text{Circle} - \text{Star} = \boxed{}$

CODE 3

7. $2 \times \text{Circle} = \boxed{}$

8. $2 \times \text{Circle} + \text{Star} = \boxed{}$

CODE 4

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

10. $\boxed{} + \text{Triangle} = 15$ 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

 hexagon = **2**
  circle = **7**
  triangle = **5**
  pentagon = **4**
  star = **10**

Every symbol is a whole number from 1 to 10.

- | | | |
|-----|--|-----------------|
| 1. |  + 2  (pentagon + 2 x circle) | 18 |
| 2. | 2  -  (2 x circle - hexagon) | 12 |
| 3. |  -  (star - circle) | 3 |
| 4. | 2  +  (2 x triangle + star) | 20 |
| 5. |  +  +  (star + circle + triangle) | 22 |
| 6. | 2  -  (2 x circle - star) | 4 |
| 7. | 2  (2 x circle) | 14 |
| 8. | 2  +  (2 x circle + star) | 24 |
| 9. |  +  = 11 (? + circle) | pentagon |
| 10. |  +  = 15 (? + triangle) | star |

Vault code: 2 0 4 4