Pirate Captain's Chest Code

Solve each symbol equation to discover the four digit combination that unlocks the captain's ironbound treasure chest.

Name: _____ **Date:** _____

1 THE KEY

★ = 10 ⬟ = 15 ✚ = ☐ ♡? = ☐ ▲ = 14

☾? = ☐

Every symbol is a whole number from 1 to 20. 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.

✚ + ⬟ = 20

☾² = 400

♥ - ✚ = 11

3 CRACK THESE

1. ⬟ × ▲ × ✚ = ☐
2. ▲ × ☾ + ✚ × ⬟ = ☐ CODE 1
3. ▲ × ☾ - ★ × ♥ = ☐
4. ♥ × ☾ - ▲ × ⬟ = ☐ CODE 2
5. 10▲ - ✚ = ☐
6. 3▲ + 2⬟ = ☐ CODE 3
7. ☾ × ✚ × ♥ = ☐
8. ♥ ÷ 2 + ✚ = ☐ CODE 4
9. 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 captain blackbeards sunken.

TEACHER / PARENT

Answer Key

Pirate Captain's Chest Code · Grade 5 Crack the Code

The key

★ star = **10** ⬟ pentagon = **15** ✚ cross = **5** (hidden) ♥ heart = **16** (hidden) ▲ triangle = **14**

☾ moon = **20** (hidden)

Every symbol is a whole number from 1 to 20.

1.	⬟ × ▲ × ✚ (pentagon x triangle x cross)	**1050**
2.	▲ × ☾ + ✚ × ⬟ (triangle x moon + cross x pentagon)	**355**
3.	▲ × ☾ - ★ × ♥ (triangle x moon - star x heart)	**120**
4.	♥ × ☾ - ▲ × ⬟ (heart x moon - triangle x pentagon)	**110**
5.	**10**▲ - ✚ (10 x triangle - cross)	**135**
6.	**3**▲ + **2**⬟ (3 x triangle + 2 x pentagon)	**72**
7.	☾ × ✚ × ♥ (moon x cross x heart)	**1600**
8.	♥ ÷ **2** + ✚ (heart / 2 + cross)	**13**
9.	**10**✚ - ★ (10 x cross - star)	**40**
10.	☾ × (⬟ - ✚) (moon x (pentagon - cross))	**200**

Vault code: **5 0 2 3**