

The Jack-o'-Lantern Crypt

Solve the math puzzles by finding the values of the pumpkin, bat, and candy corn symbols to reveal the four-digit combination.

Name: _____ Date: _____

1 THE KEY

$$\text{Pumpkin} = 9 \quad \text{Bat} = \boxed{} \quad \text{Candy Corn} = 11 \quad \text{Pumpkin} = 10 \quad \text{Bat} = \boxed{} \quad \text{Candy Corn} = \boxed{}$$

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.

$$\star + \star + \star = 24$$

$$5 \blacklozenge = 70$$

$$\blacklozenge + \bullet = 15$$

3 CRACK THESE

$$1. \text{Candy Corn} \times \blacklozenge - \bullet = \boxed{}$$

$$2. \bullet \times \blacklozenge = \boxed{}$$

CODE 1

$$3. (\blacklozenge - \blacklozenge) \times \text{Candy Corn} = \boxed{}$$

$$4. (\blacklozenge + \star) \times \text{Candy Corn} = \boxed{}$$

CODE 2

$$5. \blacklozenge \times \text{Candy Corn} + \text{Pumpkin} = \boxed{}$$

$$6. 10 \text{Pumpkin} - \blacklozenge = \boxed{}$$

CODE 3

$$7. 10 \blacklozenge - \text{Pumpkin} = \boxed{}$$

$$8. 100 \blacklozenge + \text{Pumpkin} = \boxed{}$$

CODE 4

$$9. 3 \blacklozenge + 2 \text{Pumpkin} = \boxed{}$$

$$10. 3 \text{Candy Corn} + 2 \text{Pumpkin} = \boxed{}$$

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 heavy wooden chest.

Answer Key

The Jack-o'-Lantern Crypt · Grade 4 Crack the Code

The key

 pentagon = **9**
  diamond = **14** (hidden)
  moon = **11**
  circle = **10**
  hexagon = **5** (hidden)
 star = **8** (hidden)

Every symbol is a whole number from 1 to 15.

1. $\text{moon} \times \text{diamond} - \text{circle}$ **144**
2. $\text{circle} \times \text{diamond}$ **140**
3. $(\text{diamond} - \text{hexagon}) \times \text{moon}$ **99**
4. $(\text{diamond} + \text{star}) \times \text{moon}$ **242**
5. $\text{diamond} \times \text{moon} + \text{pentagon}$ **163**
6. $10 \times \text{pentagon} - \text{hexagon}$ **85**
7. $10 \times \text{diamond} - \text{pentagon}$ **131**
8. $100 \times \text{hexagon} + \text{pentagon}$ **509**
9. $3 \times \text{diamond} + 2 \times \text{pentagon}$ **60**
10. $3 \times \text{moon} + 2 \times \text{pentagon}$ **51**

Vault code: 0 2 5 9