

Name _____

Factors and Multiples**COMMON CORE STANDARD—4.OA.4**
Gain familiarity with factors and multiples.**Is the number a multiple of 8? Write *yes* or *no*.**

1. 4

2. 8

3. 20

4. 40

Think: Since $4 \times 2 = 8$,
4 is a *factor* of 8, not a
multiple of 8.**no****List the next nine multiples of each number.****Find the common multiples.**

5. Multiples of 4: 4, _____

Multiples of 7: 7, _____

Common multiples: _____

6. Multiples of 3: 3, _____

Multiples of 9: 9, _____

Common multiples: _____

7. Multiples of 6: 6, _____

Multiples of 8: 8, _____

Common multiples: _____

Tell whether 24 is a factor or multiple of the number.**Write *factor*, *multiple*, or *neither*.**

8. 6 _____

9. 36 _____

10. 48 _____

Problem Solving11. Ken paid \$12 for two magazines. The cost of each magazine was a multiple of \$3. What are the possible prices of the magazines?
_____12. Jodie bought some shirts for \$6 each. Marge bought some shirts for \$8 each. The girls spent the same amount of money on shirts. What is the least amount they could have spent?

Name _____

Prime and Composite Numbers



COMMON CORE STANDARD—4.OA.4
Gain familiarity with factors and multiples.

Tell whether the number is *prime* or *composite*.

1. 47

Think: Does 47 have other factors besides 1 and itself?

prime

2. 68

3. 52

4. 63

5. 75

6. 31

7. 77

8. 59

9. 87

10. 72

11. 49

12. 73

Problem Solving



13. Kai wrote the number 85 on the board. Is 85 prime or composite? **Explain.**

14. Lisa says that 43 is a 2-digit odd number that is composite. Is she correct? **Explain.**

Name _____

Number Patterns



COMMON CORE STANDARD—4.OA.5
Generate and analyze patterns.

Use the rule to write the first twelve numbers in the pattern.
Describe another pattern in the numbers.

1. Rule: *Add 8.* First term: 5

Think: Add 8.



5, 13, 21, 29, 37, 45, 53, 61, 69, 77, 85, 93

All the terms are odd numbers.

2. Rule: *Subtract 7.* First term: 95

3. Rule: *Add 15, subtract 10.* First term: 4

4. Rule: *Add 1, multiply by 2.* First term: 2

Problem Solving



5. Barb is making a bead necklace. She strings 1 white bead, then 3 blue beads, then 1 white bead, and so on. Write the numbers for the first eight beads that are white. What is the rule for the pattern?

6. An artist is arranging tiles in rows to decorate a wall. Each new row has 2 fewer tiles than the row below it. If the first row has 23 tiles, how many tiles will be in the seventh row?
