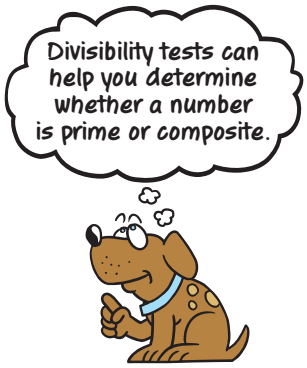
REVIEW: Prime and Composite Numbers

Name _____

Key Concept and Vocabulary

A **prime number** is a whole number greater than 1 with exactly two factors, 1 and itself.

A **composite number** is a whole number greater than 1 with more than two factors.



Skill Examples

1. 4 is even, so it is divisible by 2.
4 has a factor in addition to 1 and itself.

∴ So, 4 is *composite.*

2. 11 has exactly two factors, 1 and itself.

∴ So, 11 is *prime.*

3. 75 is divisible by 3 because $7 + 5 = 12$ is divisible by 3.
75 has factors in addition to 1 and itself.

∴ So, 75 is *composite.*

Application Example

4. You collect 23 acorns. Can you separate the acorns into equal groups?

23 has exactly two factors, 1 and itself.

∴ You cannot separate the acorns into equal groups.

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

5. 2 prime

6. 5 prime

7. 51 composite

8. 7 prime

9. 36 composite

10. 48 composite

11. 60 composite

12. 85 composite

13. 13 prime

14. 19 prime

15. 54 composite

16. 29 prime

17. 49 composite

18. 37 prime

19. 72 composite

20. **MARCHING BAND** A marching band has 65 students. Can the band director arrange the students into a rectangular array with more than 1 row and more than 1 student in each row? Explain.

yes; The ones digit of 65 is 5, so 65 is divisible by 5. The students can be arranged into a rectangular array with 5 rows and 13 students in each row or 13 rows and 5 students in each row.

21. **LISTING PRIME NUMBERS** List all the prime numbers that are less than 50.

2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47