



## PRIME OR COMPOSITE?

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

A composite number is a whole number *greater than one* that has more than two factors.

**DIRECTIONS:** Complete the table below. If the number is a composite, you will need to give only one set of factors to prove that the number is a composite. (*For example*, if the number is 36, you can give 12 and 3, 2 and 18, 6 and 6, or 4 and 9.) The first and second ones have been done for you. Use the Table of Factors found in the Appendix to help you.

	Number	One Set of Factors	Prime or Composite
1.	20	5, 4	Composite
2.	17	1, 17	Prime
3.	33		
4.	36		
5.	11		
6.	15		
7.	29		
8.	13		
9.	112		
10.	47		
11.	87		
12.	99		
13.	83		
14.	48		
15.	93		
16.	57		
17.	49		
18.	100		
19.	41		
20.	71		

**Clue:** You should have 8 primes and 12 composites including the 2 examples.



LESSON

**3-1**

**Practice**

**Prime Factorization**

Tell whether each number is prime or composite.

1. 33

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2. 41

\_\_\_\_\_

3. 52

\_\_\_\_\_

4. 79

\_\_\_\_\_

5. 96

\_\_\_\_\_

6. 121

\_\_\_\_\_

7. 83

\_\_\_\_\_

8. 119

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Write the prime factorization of each number.

9. 57

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10. 49

\_\_\_\_\_

11. 88

\_\_\_\_\_

12. 95

\_\_\_\_\_

13. 105

\_\_\_\_\_

14. 98

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15. 52

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16. 42

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17. 68

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18. 91

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19. 60

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20. 72

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21. 56

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22. 144

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23. 370

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24. 168

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25. 124

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26. 515

\_\_\_\_\_

27. 725

\_\_\_\_\_

28. 220

\_\_\_\_\_

29. 450

\_\_\_\_\_

30. 1,000

\_\_\_\_\_

31. 1,040

\_\_\_\_\_

32. 2,500

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33. The prime factorization of a number is  $3^2 \cdot 5 \cdot 11$ . What is the number?

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