2015

Prime or Composite Quiz

Write if each number is prime or composite and PROVE it!

number	Prime or composite	Proof
1. 83		
2. 91		
3. 79		
4. 51		
5. 37		

Nov 7-8:16 AM

Informal Assessment: (No Calculators!)

List the factors of each number. Then write if it's prime or composite. (2 points each)

1.) 32

2.) 84

3.) 31

4.) 22

Circle the multiples of each number. (Use your divisibility rules.)

5.) 3: 81 17 39 27 102

6.) 7: 62 28 91 43 168

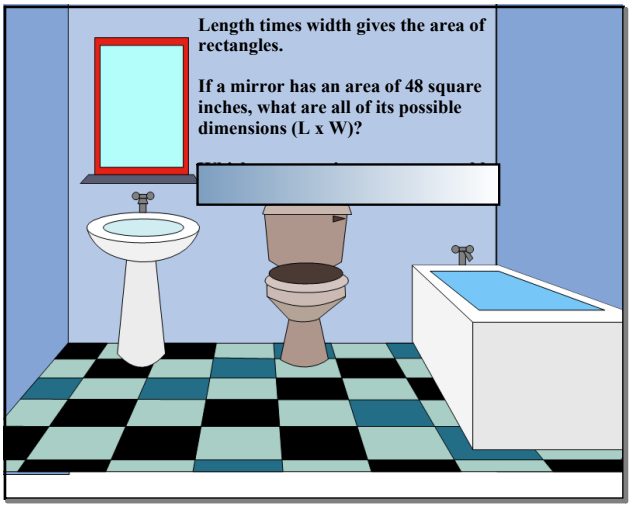
Nov 7-7:39 AM

Prime Factorization

Write the prime factorization of composite numbers.

You are going to LOVE this!!
- Mrs. Livingstone

Nov 4-10:24 AM



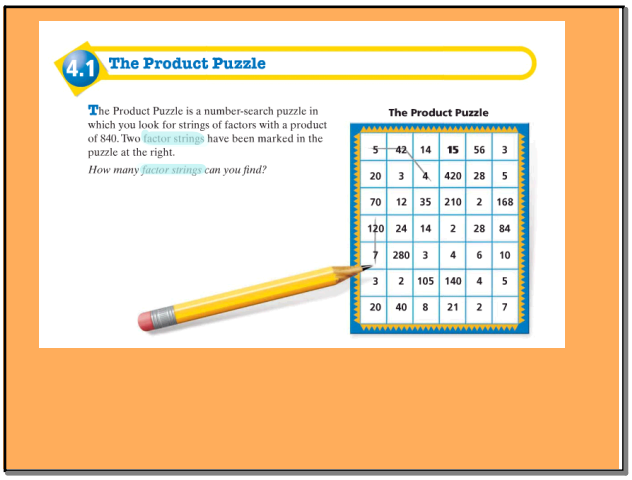
Bathroom scene

What is a product?

What is a factor?

List all the factor pairs of 18:

Nov 4-10:26 AM

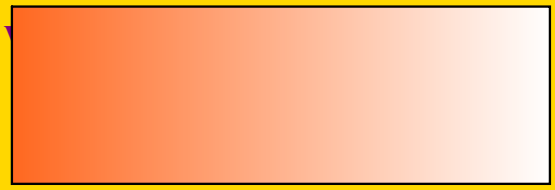


Nov 14-7:03 AM

What is a prime number?

Nov 14-6:45 AM

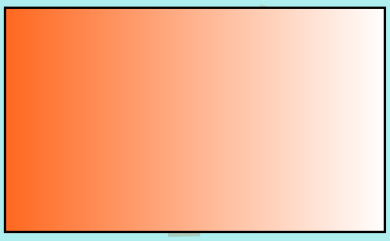
What is prime factorization?



Nov 4-10:27 AM

Factor Trees - Used to find the prime factorization of numbers

18



Nov 4-10:29 AM

Upside Down Division

18

* only choose prime numbers to divide into (2,3,5)

Aug 30-1:57 PM

Use a factor tree and upside down division to write the prime factorization:

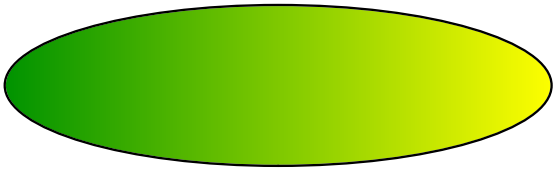
36

Nov 4-10:55 AM

54

Nov 4-11:19 AM

57



Nov 4-11:19 AM

534

Is this number divisible by.....

2 3 4 5 6 7 8 9 10

List all the factors of.....

51 39 57

Tell whether each number is prime or composite.....

47 1,358 91 1

Sep 8-2:57 PM

Write the prime factorization of.....

1.) 42 **2.) 155**

3.) 64 **4.) 32**

Nov 1-6:49 AM

Use a factor tree to find the prime factorization.

1. 84 **2.** 343 **3.** 135 **4.** 180

5. 48 **6.** 225 **7.** 93 **8.** 126

Course 2 Blue workbook page 13

1) 45 2) 62 3) 66 4) 120

5) 93 6) 110 7) 30 8) 74

Sep 8-2:58 PM

Use factor trees to find the prime factorization of the following numbers:

9. 290 **10.** 900 **11.** 575 **12.** 90

13. 220 **14.** 350 **15.** 495 **16.** 480

17. 2,000 **18.** 1,040 **19.** 1,650 **20.** 3,000

Sep 8-8:39 AM

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

22. You can factor 150 as 15 • 10. List four other ways can you factor 150.

23. A number x is a prime factor of 65 and 104. What is the number?

Write the composite number for each prime factorization.

24. $2^5 \cdot 5^2$ **25.** $3^3 \cdot 5 \cdot 11$ **26.** $4^3 \cdot 7 \cdot 13$ **27.** $2^8 \cdot 3^5$

28. The prime factors of a number are all the prime numbers between 20 and 30. No factor is repeated. What is the number?

Sep 8-8:40 AM

Skill: Prime Factorization

1. 4; 2; 2
2. 5; 5; 3; 5
3. 4; 2; 2; 3; 7
4. 35; 2; 3; 5; 7
5. 2×29
6. $2 \times 2 \times 2 \times 3 \times 3$
7. $2 \times 2 \times 2 \times 5$
8. $2 \times 5 \times 31$
9. 1,540
10. 17,017
11. 4 ways; 2 groups of 16, 4 groups of 8, 8 groups of 4, 16 groups of 2
12. $2 \cdot 3 \cdot 13$
13. $2 \cdot 3^2 \cdot 7$
14. 5^3
15. $2 \cdot 3^2 \cdot 5$
16. $2^2 \cdot 23$
17. $2^2 \cdot 3^2 \cdot 5$

Sep 12-6:39 PM

it's prime or composite. (2 points each)

1.) 32 1, 2, 4, 8, 16, 32 composite

2.) 84 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42, 84

3.) 31 1, 31 Prime

4.) 22 1, 2, 11, 22 composite

Circle the multiples of each number. (Use your divisibility rules.)

5.) 3: (81) 17 (39) (27) (102)

6.) 7: 62 (28) (91) 43 (168)

Nov 7-9:02 AM

Nov 7-8:21 AM