

Number Theory and Fractions

Number Theory

4.1.1 Divisibility

Tell whether each number is divisible by 2, 3, 4, 5, 6, 9, and 10.

1. 741

2. 810

3. 675

4. 480

5. 908

6. 146

7. 514

8. 405

Tell whether each number is prime or composite.

9. 34

10. 29

11. 61

12. 81

13. 51

14. 23

15. 97

16. 93

17. 77

18. 41

19. 67

20. 39

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4.1.2 Factors and Prime Factorization

List all of the factors of each number.

21. 24

22. 37

23. 42

24. 56

25. 67

26. 72

27. 85

28. 92

Write the prime factorization of each number.

29. 49

30. 38

31. 76

32. 60

33. 81

34. 132

35. 140

36. 87

4.1.3 Greatest Common Factor

Find the GCF of each set of numbers.

37. 10 and 35

38. 28 and 70

39. 36 and 72

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40. 26, 48, and 62

41. 16, 40, and 88

42. 12, 60, and 68

43. 30, 45, and 75

44. 24, 48, and 84

45. 16, 48, and 72

46. The local recreation center held a scavenger hunt. There were 15 boys and 9 girls at the event. The group was divided into the greatest number of teams possible with the same number of boys on each team and the same number of girls on each team. How many teams were made if each person was on a team?

47. Ms. Kline makes balloon arrangements. She has 32 blue balloons, 24 yellow balloons, and 16 white balloons. Each arrangement must have the same number of each color. What is the greatest number of arrangements that Ms. Kline can make if every balloon is used?