

Factors

1. Factorize:

$15a + 15b =$	$10x + 2y =$
$36w - 6 =$	$100 - 25x =$

2. Compute using most convenient way: $12 \cdot 17 + 35 \cdot 13 + 17 \cdot 23 =$



Prime numbers

Prime numbers are building blocks of all composite numbers.

Eratosthenes (c.276–194 bc) was a Greek scientist who was the first to measure the Earth's circumference using geometry. Eratosthenes produced a reliable, logical method for finding prime numbers:

The Sieve of Eratosthenes.

It does so by crossing out composite numbers (not primes). Composite numbers are multiples of each prime, starting with the multiples of 2.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

3. Find all prime factors of the following numbers:

66

28

128

555

1233

4. Find the GCF (GCD) of:

42 And 45

81 94 and 125

Word Problem 1



For Halloween the Jonson family bought 168 mini chocolate bars and 180 gummy worms. What is the **largest** number of kids between whom the Jonson family can divide both kinds of candy evenly?



Find the LCM of

8 and 12

15 and 18 and 21

Word Problem 2 A grasshopper jumps the 12 cm distance each jump. A little frog jumps the 15 cm distance each jump. They start jumping from the point 0 and jump along a big ruler. What is the closest point (measure) on the ruler they both can land?

