



Key Vocabulary
multiply
groups of
lots of
times
divide
share
remainder
factor
multiple
product
prime number
composite number
related facts
squared
cubed

Factors

A factor is a number that divides into another number exactly, without leaving a remainder.

The factors of 20 are 1, 2, 4, 5, 10 and 20.

The factor pairs are:

- 1 and 20
- 2 and 10
- 4 and 5

Factors of 6

2 6

1 3

Factors of 15

5 15

1 3

A common factor is a factor of 2 or more numbers.

Prime Numbers

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

Squared² and Cubed³ Numbers

$2^2 = 4$	$2^3 = 8$	$5^2 = 25$	$5^3 = 125$
$2 \times 2 = 4$	$2 \times 2 \times 2 = 8$	$5 \times 5 = 25$	$5 \times 5 \times 5 = 125$

Related Calculations

$8 \times 9 = 72$	$9 \times 8 = 72$
$80 \times 9 = 720$	$90 \times 8 = 720$
$72 \div 9 = 8$	$72 \div 8 = 9$
$720 \div 9 = 80$	$720 \div 8 = 90$



Short Multiplication	Long Multiplication																																																																				
$2543 \times 7 = 17801$	$2543 \times 67 = 170381$																																																																				
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<div style="border: 1px solid orange; padding: 5px; margin: 5px auto; width: 80%;"> Remember to move any regrouped digits into the next column. After the next multiplication, add the regrouped number to the answer. </div>	<div style="border: 1px solid orange; padding: 5px; margin: 5px auto; width: 80%;"> Before multiplying by the number in the tens column, remember to use zero as a placeholder because the 6 in 67 is 6 tens (60). </div>																																																																				

Division	Short Division																																								
$136 \div 4 = 34$																																									
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If you know 3×4 , how does that help you solve 300×400 ? 3×0.4 ? 3000×4 ? What is the same and what is different about these answers?

Solve 6172×72 . How would you use to calculate this?