Greatest Common Factor (B)

Name:

Date:

Use the prime factors of the numbers in each set to calculate the greatest common factor.

a) $190 = 2 \times 5 \times 19$	b) 66
$360 = \textcircled{2} \times 2 \times 2 \times 3 \times 3 \times \textcircled{5}$	192
$GCF = (2) \times (5) = 10$	

c) 270	d) 72
297	120

e) 150	f) 234
48	252

g) 234	h) 30
18	168

i) 124	j) 248
84	192

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Greatest Common Factor (B) Answers

Name:

Date:

Use the prime factors of the numbers in each set to calculate the greatest common factor.

- a) $190 = (2) \times (5) \times 19$ $360 = (2) \times 2 \times 2 \times 3 \times 3 \times (5)$ GCF = $(2) \times (5) = 10$
- c) $270 = 2 \times (3) \times (3) \times (3) \times 5$ $297 = (3) \times (3) \times (3) \times 11$ GCF = (3) × (3) × (3) = 27

b)
$$66 = (2) \times (3) \times 11$$

 $192 = (2) \times 2 \times 2 \times 2 \times 2 \times 2 \times 3$
GCF = $(2) \times (3) = 6$

d)
$$72 = (2) \times (2) \times (2) \times (3) \times 3$$

 $120 = (2) \times (2) \times (2) \times (3) \times 5$
GCF = $(2) \times (2) \times (2) \times (3) = 24$

e)
$$150 = (2) \times (3) \times 5 \times 5$$

 $48 = (2) \times 2 \times 2 \times 2 \times (3)$
GCF = $(2) \times (3) = 6$

f) $234 = 2 \times 3 \times 3 \times 13$ $252 = 2 \times 2 \times 3 \times 3 \times 7$ GCF = $2 \times 3 \times 3 = 18$

g)
$$234 = (2) \times (3) \times (3) \times 13$$

 $18 = (2) \times (3) \times (3)$
GCF = $(2) \times (3) \times (3) = 18$

h)
$$30 = (2) \times (3) \times 5$$

 $168 = (2) \times 2 \times 2 \times (3) \times 7$
GCF = $(2) \times (3) = 6$

i)
$$124 = (2) \times (2) \times 31$$

 $84 = (2) \times (2) \times 3 \times 7$
GCF = $(2) \times (2) = 4$

j)
$$248 = (2) \times (2) \times (2) \times 31$$

 $192 = (2) \times (2) \times (2) \times 2 \times 2 \times 2 \times 3$
GCF = $(2) \times (2) \times (2) = 8$