Greatest Common Factor (H)

Name: _____ Date: _____

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

a) $126 = 2 \times (3) \times (3) \times (7)$

$63 = (3) \times (3) \times (7)$

GCF = $(3) \times (3) \times (7) = 63$

b) 54

390

c) 210

375

d) 52

284

e) 39

195

f) 56

156

g) 54

138

h) 260

50

i) 304

112

j) 66

231

Greatest Common Factor (H) Answers

Name: _____ Date: _____

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

a) $126 = 2 \times (3) \times (3) \times (7)$

$63 = (3) \times (3) \times (7)$

GCF = $(3) \times (3) \times (7) = 63$

b) $54 = (2) \times (3) \times 3 \times 3$

$390 = (2) \times (3) \times 5 \times 13$

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

c) $210 = 2 \times (3) \times (5) \times 7$

$375 = (3) \times (5) \times 5 \times 5$

GCF = $(3) \times (5) = 15$

d) $52 = (2) \times (2) \times 13$

$284 = (2) \times (2) \times 71$

GCF = $(2) \times (2) = 4$

e) $39 = (3) \times (13)$

$195 = (3) \times 5 \times (13)$

GCF = $(3) \times (13) = 39$

f) $56 = (2) \times (2) \times 2 \times 7$

$156 = (2) \times (2) \times 3 \times 13$

GCF = $(2) \times (2) = 4$

g) $54 = (2) \times (3) \times 3 \times 3$

$138 = (2) \times (3) \times 23$

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

h) $260 = (2) \times 2 \times (5) \times 13$

$50 = (2) \times (5) \times 5$

GCF = $(2) \times (5) = 10$

i) $304 = (2) \times (2) \times (2) \times (2) \times 19$

$112 = (2) \times (2) \times (2) \times (2) \times 7$

GCF = $(2) \times (2) \times (2) \times (2) = 16$

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

$231 = (3) \times 7 \times (11)$

GCF = $(3) \times (11) = 33$