

# Greatest Common Factor (J)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

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

a)  $108 = 2 \times 2 \times 3 \times 3 \times 3$

b) 174

$140 = 2 \times 2 \times 5 \times 7$

144

$GCF = 2 \times 2 = 4$

c) 198

d) 104

110

128

e) 190

f) 138

200

120

g) 196

h) 102

147

120

i) 153

j) 168

171

138

# Greatest Common Factor (J) Answers

Name: \_\_\_\_\_

Date: \_\_\_\_\_

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

a)  $108 = 2 \times 2 \times 3 \times 3 \times 3$

$140 = 2 \times 2 \times 5 \times 7$

$GCF = 2 \times 2 = 4$

b)  $174 = 2 \times 3 \times 29$

$144 = 2 \times 2 \times 2 \times 2 \times 3 \times 3$

$GCF = 2 \times 3 = 6$

c)  $198 = 2 \times 3 \times 3 \times 11$

$110 = 2 \times 5 \times 11$

$GCF = 2 \times 11 = 22$

d)  $104 = 2 \times 2 \times 2 \times 13$

$128 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$

$GCF = 2 \times 2 \times 2 = 8$

e)  $190 = 2 \times 5 \times 19$

$200 = 2 \times 2 \times 2 \times 5 \times 5$

$GCF = 2 \times 5 = 10$

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

$120 = 2 \times 2 \times 2 \times 3 \times 5$

$GCF = 2 \times 3 = 6$

g)  $196 = 2 \times 2 \times 7 \times 7$

$147 = 3 \times 7 \times 7$

$GCF = 7 \times 7 = 49$

h)  $102 = 2 \times 3 \times 17$

$120 = 2 \times 2 \times 2 \times 3 \times 5$

$GCF = 2 \times 3 = 6$

i)  $153 = 3 \times 3 \times 17$

$171 = 3 \times 3 \times 19$

$GCF = 3 \times 3 = 9$

j)  $168 = 2 \times 2 \times 2 \times 3 \times 7$

$138 = 2 \times 3 \times 23$

$GCF = 2 \times 3 = 6$