

# Greatest Common Factor (G)

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

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

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

a)  $128 = \textcircled{2} \times \textcircled{2} \times \textcircled{2} \times \textcircled{2} \times \textcircled{2} \times \textcircled{2} \times \textcircled{2} \times 2$     b) 100

$192 = \textcircled{2} \times \textcircled{2} \times \textcircled{2} \times \textcircled{2} \times \textcircled{2} \times \textcircled{2} \times 3$     184

$\text{GCF} = \textcircled{2} \times \textcircled{2} \times \textcircled{2} \times \textcircled{2} \times \textcircled{2} \times \textcircled{2} = 64$

c) 189

171

d) 160

152

e) 112

196

f) 100

112

g) 176

152

h) 108

160

i) 150

156

j) 174

126

# Greatest Common Factor (G) Answers

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

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

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

a)  $128 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$     b)  $100 = 2 \times 2 \times 5 \times 5$

$192 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 3$      $184 = 2 \times 2 \times 2 \times 23$

$GCF = 2 \times 2 \times 2 \times 2 \times 2 \times 2 = 64$      $GCF = 2 \times 2 = 4$

c)  $189 = 3 \times 3 \times 3 \times 7$

$171 = 3 \times 3 \times 19$

$GCF = 3 \times 3 = 9$

d)  $160 = 2 \times 2 \times 2 \times 2 \times 2 \times 5$

$152 = 2 \times 2 \times 2 \times 19$

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

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

$196 = 2 \times 2 \times 7 \times 7$

$GCF = 2 \times 2 \times 7 = 28$

f)  $100 = 2 \times 2 \times 5 \times 5$

$112 = 2 \times 2 \times 2 \times 2 \times 7$

$GCF = 2 \times 2 = 4$

g)  $176 = 2 \times 2 \times 2 \times 2 \times 11$

$152 = 2 \times 2 \times 2 \times 19$

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

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

$160 = 2 \times 2 \times 2 \times 2 \times 5$

$GCF = 2 \times 2 = 4$

i)  $150 = 2 \times 3 \times 5 \times 5$

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

$GCF = 2 \times 3 = 6$

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

$126 = 2 \times 3 \times 3 \times 7$

$GCF = 2 \times 3 = 6$