

Greatest Common Factor (D)

Name: _____

Date: _____

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

a) $180 = 2 \times 2 \times 3 \times 3 \times 5$

b) 188

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

112

$GCF = 2 \times 2 \times 3 \times 3 = 36$

c) 171

d) 100

198

120

e) 116

f) 105

124

175

g) 156

h) 140

186

110

i) 135

j) 186

165

138

Greatest Common Factor (D) Answers

Name: _____

Date: _____

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

a) $180 = 2 \times 2 \times 3 \times 3 \times 5$

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

$GCF = 2 \times 2 \times 3 \times 3 = 36$

b) $188 = 2 \times 2 \times 47$

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

$GCF = 2 \times 2 = 4$

c) $171 = 3 \times 3 \times 19$

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

$GCF = 3 \times 3 = 9$

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

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

$GCF = 2 \times 2 \times 5 = 20$

e) $116 = 2 \times 2 \times 29$

$124 = 2 \times 2 \times 31$

$GCF = 2 \times 2 = 4$

f) $105 = 3 \times 5 \times 7$

$175 = 5 \times 5 \times 7$

$GCF = 5 \times 7 = 35$

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

$186 = 2 \times 3 \times 31$

$GCF = 2 \times 3 = 6$

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

$110 = 2 \times 5 \times 11$

$GCF = 2 \times 5 = 10$

i) $135 = 3 \times 3 \times 3 \times 5$

$165 = 3 \times 5 \times 11$

$GCF = 3 \times 5 = 15$

j) $186 = 2 \times 3 \times 31$

$138 = 2 \times 3 \times 23$

$GCF = 2 \times 3 = 6$