

Greatest Common Factor (E)

Name: _____

Date: _____

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

a) $184 = 2 \times 2 \times 2 \times 23$

b) 100

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

180

$GCF = 2 \times 2 = 4$

c) 112

d) 132

104

200

e) 192

f) 144

128

198

g) 100

h) 117

150

126

i) 140

j) 180

148

189

Greatest Common Factor (E) Answers

Name: _____

Date: _____

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

a) $184 = 2 \times 2 \times 2 \times 23$

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

$GCF = 2 \times 2 = 4$

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

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

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

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

$104 = 2 \times 2 \times 2 \times 13$

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

d) $132 = 2 \times 2 \times 3 \times 11$

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

$GCF = 2 \times 2 = 4$

e) $192 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 3$

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

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

f) $144 = 2 \times 2 \times 2 \times 2 \times 3 \times 3$

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

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

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

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

$GCF = 2 \times 5 \times 5 = 50$

h) $117 = 3 \times 3 \times 13$

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

$GCF = 3 \times 3 = 9$

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

$148 = 2 \times 2 \times 37$

$GCF = 2 \times 2 = 4$

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

$189 = 3 \times 3 \times 3 \times 7$

$GCF = 3 \times 3 = 9$