

Greatest Common Factor (I)

Name: _____

Date: _____

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

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

b) 188

$364 = 2 \times 2 \times 7 \times 13$

192

$GCF = 2 \times 2 = 4$

c) 68

d) 128

124

136

e) 135

f) 88

387

368

g) 60

h) 252

376

387

i) 290

j) 216

160

186

Greatest Common Factor (I) Answers

Name: _____

Date: _____

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

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

$364 = 2 \times 2 \times 7 \times 13$

$GCF = 2 \times 2 = 4$

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

$192 = 2 \times 2 \times 2 \times 2 \times 2 \times 3$

$GCF = 2 \times 2 = 4$

c) $68 = 2 \times 2 \times 17$

$124 = 2 \times 2 \times 31$

$GCF = 2 \times 2 = 4$

d) $128 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$

$136 = 2 \times 2 \times 2 \times 17$

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

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

$387 = 3 \times 3 \times 43$

$GCF = 3 \times 3 = 9$

f) $88 = 2 \times 2 \times 2 \times 11$

$368 = 2 \times 2 \times 2 \times 2 \times 23$

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

g) $60 = 2 \times 2 \times 3 \times 5$

$376 = 2 \times 2 \times 2 \times 47$

$GCF = 2 \times 2 = 4$

h) $252 = 2 \times 2 \times 3 \times 3 \times 7$

$387 = 3 \times 3 \times 43$

$GCF = 3 \times 3 = 9$

i) $290 = 2 \times 5 \times 29$

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

$GCF = 2 \times 5 = 10$

j) $216 = 2 \times 2 \times 2 \times 3 \times 3 \times 3$

$186 = 2 \times 3 \times 31$

$GCF = 2 \times 3 = 6$