Greatest Common Factor (A)

Name: _____ Date: _____

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

a) $396 = (2) \times (2) \times (3) \times 3 \times 11$

$204 = (2) \times (2) \times (3) \times 17$

GCF = $(2) \times (2) \times (3) = 12$

b) 297

135

c) 144

68

d) 186

288

e) 48

306

f) 76

108

g) 322

98

h) 72

78

i) 200

190

j) 44

4

Greatest Common Factor (A) Answers

Name: _____ Date: _____

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

a) $396 = (2) \times (2) \times (3) \times 3 \times 11$

$204 = (2) \times (2) \times (3) \times 17$

GCF = $(2) \times (2) \times (3) = 12$

b) $297 = (3) \times (3) \times (3) \times 11$

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

GCF = $(3) \times (3) \times (3) = 27$

c) $144 = (2) \times (2) \times 2 \times 2 \times 3 \times 3$

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

GCF = $(2) \times (2) = 4$

d) $186 = (2) \times (3) \times 31$

$288 = (2) \times 2 \times 2 \times 2 \times 2 \times (3) \times 3$

GCF = $(2) \times (3) = 6$

e) $48 = (2) \times 2 \times 2 \times 2 \times (3)$

$306 = (2) \times (3) \times 3 \times 17$

GCF = $(2) \times (3) = 6$

f) $76 = (2) \times (2) \times 19$

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

GCF = $(2) \times (2) = 4$

g) $322 = (2) \times (7) \times 23$

$98 = (2) \times (7) \times 7$

GCF = $(2) \times (7) = 14$

h) $72 = (2) \times 2 \times 2 \times (3) \times 3$

$78 = (2) \times (3) \times 13$

GCF = $(2) \times (3) = 6$

i) $200 = (2) \times 2 \times 2 \times (5) \times 5$

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

GCF = $(2) \times (5) = 10$

j) $44 = (2) \times (2) \times 11$

$4 = (2) \times (2)$

GCF = $(2) \times (2) = 4$

Greatest Common Factor (B)

Name: _____ Date: _____

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

a) $190 = (2) \times (5) \times 19$

$360 = (2) \times 2 \times 2 \times 3 \times 3 \times (5)$

GCF = $(2) \times (5) = 10$

b) 66

192

c) 270

297

d) 72

120

e) 150

48

f) 234

252

g) 234

18

h) 30

168

i) 124

84

j) 248

192

Greatest Common Factor (B) Answers

Name: _____ Date: _____

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

a) $190 = (2) \times (5) \times 19$

$360 = (2) \times 2 \times 2 \times 3 \times 3 \times (5)$

GCF = $(2) \times (5) = 10$

b) $66 = (2) \times (3) \times 11$

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

GCF = $(2) \times (3) = 6$

c) $270 = 2 \times (3) \times (3) \times (3) \times 5$

$297 = (3) \times (3) \times (3) \times 11$

GCF = $(3) \times (3) \times (3) = 27$

d) $72 = (2) \times (2) \times (2) \times (3) \times 3$

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

GCF = $(2) \times (2) \times (2) \times (3) = 24$

e) $150 = (2) \times (3) \times 5 \times 5$

$48 = (2) \times 2 \times 2 \times 2 \times (3)$

GCF = $(2) \times (3) = 6$

f) $234 = (2) \times (3) \times (3) \times 13$

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

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

g) $234 = (2) \times (3) \times (3) \times 13$

$18 = (2) \times (3) \times (3)$

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

h) $30 = (2) \times (3) \times 5$

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

GCF = $(2) \times (3) = 6$

i) $124 = (2) \times (2) \times 31$

$84 = (2) \times (2) \times 3 \times 7$

GCF = $(2) \times (2) = 4$

j) $248 = (2) \times (2) \times (2) \times 31$

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

GCF = $(2) \times (2) \times (2) = 8$

Greatest Common Factor (C)

Name: _____ Date: _____

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

a) $204 = (2) \times 2 \times (3) \times 17$

$42 = (2) \times (3) \times 7$

GCF = $(2) \times (3) = 6$

b) 294

78

c) 288

104

d) 100

376

e) 264

244

f) 168

318

g) 162

387

h) 99

396

i) 138

324

j) 325

400

Greatest Common Factor (C) Answers

Name: _____ Date: _____

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

a) $204 = (2) \times 2 \times (3) \times 17$

$42 = (2) \times (3) \times 7$

GCF = $(2) \times (3) = 6$

b) $294 = (2) \times (3) \times 7 \times 7$

$78 = (2) \times (3) \times 13$

GCF = $(2) \times (3) = 6$

c) $288 = (2) \times (2) \times (2) \times 2 \times 2 \times 3 \times 3$

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

GCF = $(2) \times (2) \times (2) = 8$

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

$376 = (2) \times (2) \times 2 \times 47$

GCF = $(2) \times (2) = 4$

e) $264 = (2) \times (2) \times 2 \times 3 \times 11$

$244 = (2) \times (2) \times 61$

GCF = $(2) \times (2) = 4$

f) $168 = (2) \times 2 \times 2 \times (3) \times 7$

$318 = (2) \times (3) \times 53$

GCF = $(2) \times (3) = 6$

g) $162 = 2 \times (3) \times (3) \times 3 \times 3$

$387 = (3) \times (3) \times 43$

GCF = $(3) \times (3) = 9$

h) $99 = (3) \times (3) \times (11)$

$396 = 2 \times 2 \times (3) \times (3) \times (11)$

GCF = $(3) \times (3) \times (11) = 99$

i) $138 = (2) \times (3) \times 23$

$324 = (2) \times 2 \times (3) \times 3 \times 3 \times 3$

GCF = $(2) \times (3) = 6$

j) $325 = (5) \times (5) \times 13$

$400 = 2 \times 2 \times 2 \times 2 \times (5) \times (5)$

GCF = $(5) \times (5) = 25$

Greatest Common Factor (D)

Name: _____ Date: _____

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

a) $150 = (2) \times (3) \times 5 \times 5$

$204 = (2) \times 2 \times (3) \times 17$

GCF = $(2) \times (3) = 6$

b) 36

304

c) 306

366

d) 78

240

e) 279

351

f) 21

357

g) 128

200

h) 360

222

i) 312

100

j) 189

243

Greatest Common Factor (D) Answers

Name: _____ Date: _____

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

a) $150 = (2) \times (3) \times 5 \times 5$

$204 = (2) \times 2 \times (3) \times 17$

GCF = $(2) \times (3) = 6$

b) $36 = (2) \times (2) \times 3 \times 3$

$304 = (2) \times (2) \times 2 \times 2 \times 19$

GCF = $(2) \times (2) = 4$

c) $306 = (2) \times (3) \times 3 \times 17$

$366 = (2) \times (3) \times 61$

GCF = $(2) \times (3) = 6$

d) $78 = (2) \times (3) \times 13$

$240 = (2) \times 2 \times 2 \times 2 \times (3) \times 5$

GCF = $(2) \times (3) = 6$

e) $279 = (3) \times (3) \times 31$

$351 = (3) \times (3) \times 3 \times 13$

GCF = $(3) \times (3) = 9$

f) $21 = (3) \times (7)$

$357 = (3) \times (7) \times 17$

GCF = $(3) \times (7) = 21$

g) $128 = (2) \times (2) \times (2) \times 2 \times 2 \times 2 \times 2$

$200 = (2) \times (2) \times (2) \times 5 \times 5$

GCF = $(2) \times (2) \times (2) = 8$

h) $360 = (2) \times 2 \times 2 \times (3) \times 3 \times 5$

$222 = (2) \times (3) \times 37$

GCF = $(2) \times (3) = 6$

i) $312 = (2) \times (2) \times 2 \times 3 \times 13$

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

GCF = $(2) \times (2) = 4$

j) $189 = (3) \times (3) \times (3) \times 7$

$243 = (3) \times (3) \times (3) \times 3 \times 3$

GCF = $(3) \times (3) \times (3) = 27$

Greatest Common Factor (E)

Name: _____ Date: _____

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

a) $124 = \textcircled{2} \times \textcircled{2} \times 31$

$204 = \textcircled{2} \times \textcircled{2} \times 3 \times 17$

GCF = $\textcircled{2} \times \textcircled{2} = 4$

b) 72

68

c) 40

4

d) 12

188

e) 180

268

f) 84

366

g) 76

44

h) 368

196

i) 308

392

j) 80

308

Greatest Common Factor (E) Answers

Name: _____ Date: _____

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

a) $124 = (2) \times (2) \times 31$

$204 = (2) \times (2) \times 3 \times 17$

GCF = $(2) \times (2) = 4$

b) $72 = (2) \times (2) \times 2 \times 3 \times 3$

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

GCF = $(2) \times (2) = 4$

c) $40 = (2) \times (2) \times 2 \times 5$

$4 = (2) \times (2)$

GCF = $(2) \times (2) = 4$

d) $12 = (2) \times (2) \times 3$

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

GCF = $(2) \times (2) = 4$

e) $180 = (2) \times (2) \times 3 \times 3 \times 5$

$268 = (2) \times (2) \times 67$

GCF = $(2) \times (2) = 4$

f) $84 = (2) \times 2 \times (3) \times 7$

$366 = (2) \times (3) \times 61$

GCF = $(2) \times (3) = 6$

g) $76 = (2) \times (2) \times 19$

$44 = (2) \times (2) \times 11$

GCF = $(2) \times (2) = 4$

h) $368 = (2) \times (2) \times 2 \times 2 \times 23$

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

GCF = $(2) \times (2) = 4$

i) $308 = (2) \times (2) \times (7) \times 11$

$392 = (2) \times (2) \times 2 \times (7) \times 7$

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

j) $80 = (2) \times (2) \times 2 \times 2 \times 5$

$308 = (2) \times (2) \times 7 \times 11$

GCF = $(2) \times (2) = 4$

Greatest Common Factor (F)

Name: _____ Date: _____

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

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

$280 = (2) \times (2) \times (2) \times 5 \times 7$

GCF = $(2) \times (2) \times (2) = 8$

b) 264

296

c) 300

340

d) 100

76

e) 75

250

f) 354

330

g) 348

220

h) 32

80

i) 76

60

j) 370

300

Greatest Common Factor (F) Answers

Name: _____ Date: _____

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

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

$280 = (2) \times (2) \times (2) \times 5 \times 7$

GCF = $(2) \times (2) \times (2) = 8$

b) $264 = (2) \times (2) \times (2) \times 3 \times 11$

$296 = (2) \times (2) \times (2) \times 37$

GCF = $(2) \times (2) \times (2) = 8$

c) $300 = (2) \times (2) \times 3 \times (5) \times 5$

$340 = (2) \times (2) \times (5) \times 17$

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

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

$76 = (2) \times (2) \times 19$

GCF = $(2) \times (2) = 4$

e) $75 = 3 \times (5) \times (5)$

$250 = 2 \times (5) \times (5) \times 5$

GCF = $(5) \times (5) = 25$

f) $354 = (2) \times (3) \times 59$

$330 = (2) \times (3) \times 5 \times 11$

GCF = $(2) \times (3) = 6$

g) $348 = (2) \times (2) \times 3 \times 29$

$220 = (2) \times (2) \times 5 \times 11$

GCF = $(2) \times (2) = 4$

h) $32 = (2) \times (2) \times (2) \times (2) \times 2$

$80 = (2) \times (2) \times (2) \times (2) \times 5$

GCF = $(2) \times (2) \times (2) \times (2) = 16$

i) $76 = (2) \times (2) \times 19$

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

GCF = $(2) \times (2) = 4$

j) $370 = (2) \times (5) \times 37$

$300 = (2) \times 2 \times 3 \times (5) \times 5$

GCF = $(2) \times (5) = 10$

Greatest Common Factor (G)

Name: _____ Date: _____

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

a) $352 = (2) \times (2) \times (2) \times (2) \times 2 \times 11$

$48 = (2) \times (2) \times (2) \times (2) \times 3$

GCF = $(2) \times (2) \times (2) \times (2) = 16$

b) 152

176

c) 24

108

d) 282

132

e) 212

40

f) 336

8

g) 72

243

h) 368

230

i) 248

12

j) 56

196

Greatest Common Factor (G) Answers

Name: _____ Date: _____

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

a) $352 = (2) \times (2) \times (2) \times (2) \times 2 \times 11$

$48 = (2) \times (2) \times (2) \times (2) \times 3$

GCF = $(2) \times (2) \times (2) \times (2) = 16$

b) $152 = (2) \times (2) \times (2) \times 19$

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

GCF = $(2) \times (2) \times (2) = 8$

c) $24 = (2) \times (2) \times 2 \times (3)$

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

GCF = $(2) \times (2) \times (3) = 12$

d) $282 = (2) \times (3) \times 47$

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

GCF = $(2) \times (3) = 6$

e) $212 = (2) \times (2) \times 53$

$40 = (2) \times (2) \times 2 \times 5$

GCF = $(2) \times (2) = 4$

f) $336 = (2) \times (2) \times (2) \times 2 \times 3 \times 7$

$8 = (2) \times (2) \times (2)$

GCF = $(2) \times (2) \times (2) = 8$

g) $72 = 2 \times 2 \times 2 \times (3) \times (3)$

$243 = (3) \times (3) \times 3 \times 3 \times 3$

GCF = $(3) \times (3) = 9$

h) $368 = (2) \times 2 \times 2 \times 2 \times (23)$

$230 = (2) \times 5 \times (23)$

GCF = $(2) \times (23) = 46$

i) $248 = (2) \times (2) \times 2 \times 31$

$12 = (2) \times (2) \times 3$

GCF = $(2) \times (2) = 4$

j) $56 = (2) \times (2) \times 2 \times (7)$

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

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

Greatest Common Factor (H)

Name: _____ Date: _____

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

a) $126 = 2 \times (3) \times (3) \times (7)$

$63 = (3) \times (3) \times (7)$

GCF = $(3) \times (3) \times (7) = 63$

b) 54

390

c) 210

375

d) 52

284

e) 39

195

f) 56

156

g) 54

138

h) 260

50

i) 304

112

j) 66

231

Greatest Common Factor (H) Answers

Name: _____ Date: _____

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

a) $126 = 2 \times (3) \times (3) \times (7)$

$63 = (3) \times (3) \times (7)$

GCF = $(3) \times (3) \times (7) = 63$

b) $54 = (2) \times (3) \times 3 \times 3$

$390 = (2) \times (3) \times 5 \times 13$

GCF = $(2) \times (3) = 6$

c) $210 = 2 \times (3) \times (5) \times 7$

$375 = (3) \times (5) \times 5 \times 5$

GCF = $(3) \times (5) = 15$

d) $52 = (2) \times (2) \times 13$

$284 = (2) \times (2) \times 71$

GCF = $(2) \times (2) = 4$

e) $39 = (3) \times (13)$

$195 = (3) \times 5 \times (13)$

GCF = $(3) \times (13) = 39$

f) $56 = (2) \times (2) \times 2 \times 7$

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

GCF = $(2) \times (2) = 4$

g) $54 = (2) \times (3) \times 3 \times 3$

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

GCF = $(2) \times (3) = 6$

h) $260 = (2) \times 2 \times (5) \times 13$

$50 = (2) \times (5) \times 5$

GCF = $(2) \times (5) = 10$

i) $304 = (2) \times (2) \times (2) \times (2) \times 19$

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

GCF = $(2) \times (2) \times (2) \times (2) = 16$

j) $66 = 2 \times (3) \times (11)$

$231 = (3) \times 7 \times (11)$

GCF = $(3) \times (11) = 33$

Greatest Common Factor (I)

Name: _____ Date: _____

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

a) $144 = \textcircled{2} \times \textcircled{2} \times 2 \times 2 \times 3 \times 3$

$364 = \textcircled{2} \times \textcircled{2} \times 7 \times 13$

GCF = $\textcircled{2} \times \textcircled{2} = 4$

b) 188

192

c) 68

124

d) 128

136

e) 135

387

f) 88

368

g) 60

376

h) 252

387

i) 290

160

j) 216

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

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

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

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

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 = $(2) \times (3) = 6$

Greatest Common Factor (J)

Name: _____ Date: _____

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

a) $172 = (2) \times (2) \times 43$

$164 = (2) \times (2) \times 41$

GCF = $(2) \times (2) = 4$

b) 132

114

c) 116

316

d) 168

8

e) 400

360

f) 318

234

g) 290

50

h) 320

368

i) 300

368

j) 130

190

Greatest Common Factor (J) Answers

Name: _____ Date: _____

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

a) $172 = (2) \times (2) \times 43$

$164 = (2) \times (2) \times 41$

GCF = $(2) \times (2) = 4$

b) $132 = (2) \times 2 \times (3) \times 11$

$114 = (2) \times (3) \times 19$

GCF = $(2) \times (3) = 6$

c) $116 = (2) \times (2) \times 29$

$316 = (2) \times (2) \times 79$

GCF = $(2) \times (2) = 4$

d) $168 = (2) \times (2) \times (2) \times 3 \times 7$

$8 = (2) \times (2) \times (2)$

GCF = $(2) \times (2) \times (2) = 8$

e) $400 = (2) \times (2) \times (2) \times 2 \times (5) \times 5$

$360 = (2) \times (2) \times (2) \times 3 \times 3 \times (5)$

GCF = $(2) \times (2) \times (2) \times (5) = 40$

f) $318 = (2) \times (3) \times 53$

$234 = (2) \times (3) \times 3 \times 13$

GCF = $(2) \times (3) = 6$

g) $290 = (2) \times (5) \times 29$

$50 = (2) \times (5) \times 5$

GCF = $(2) \times (5) = 10$

h) $320 = (2) \times (2) \times (2) \times (2) \times 2 \times 2 \times 5$

$368 = (2) \times (2) \times (2) \times (2) \times 23$

GCF = $(2) \times (2) \times (2) \times (2) = 16$

i) $300 = (2) \times (2) \times 3 \times 5 \times 5$

$368 = (2) \times (2) \times 2 \times 2 \times 23$

GCF = $(2) \times (2) = 4$

j) $130 = (2) \times (5) \times 13$

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

GCF = $(2) \times (5) = 10$