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