Greatest Common Factor (H)

Name: _____ Date: _____

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

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

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

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

b) 24

4

c) 96

16

d) 12

60

e) 70

90

f) 44

32

g) 20

72

h) 30

70

i) 28

20

j) 78

30

Greatest Common Factor (H) Answers

Name: _____ Date: _____

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

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

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

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

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

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

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

c) $96 = (2) \times (2) \times (2) \times (2) \times 2 \times 3$

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

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

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

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

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

e) $70 = (2) \times (5) \times 7$

$90 = (2) \times 3 \times 3 \times (5)$

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

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

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

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

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

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

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

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

$70 = (2) \times (5) \times 7$

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

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

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

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

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

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

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