

Greatest Common Factor (E)

Name: _____

Date: _____

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

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

b) 48

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

72

$GCF = 2 \times 2 = 4$

c) 12

d) 66

66

96

e) 90

f) 44

100

80

g) 100

h) 4

92

100

i) 75

j) 72

25

40

Greatest Common Factor (E) Answers

Name: _____

Date: _____

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

$$\text{a) } 40 = (2) \times (2) \times 2 \times 5$$

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

$$\text{GCF} = (2) \times (2) = 4$$

$$\text{b) } 48 = (2) \times (2) \times (2) \times 2 \times (3)$$

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

$$\text{GCF} = (2) \times (2) \times (2) \times (3) = 24$$

$$\text{c) } 12 = (2) \times 2 \times (3)$$

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

$$\text{GCF} = (2) \times (3) = 6$$

$$\text{d) } 66 = (2) \times (3) \times 11$$

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

$$\text{GCF} = (2) \times (3) = 6$$

$$\text{e) } 90 = (2) \times 3 \times 3 \times (5)$$

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

$$\text{GCF} = (2) \times (5) = 10$$

$$\text{f) } 44 = (2) \times (2) \times 11$$

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

$$\text{GCF} = (2) \times (2) = 4$$

$$\text{g) } 100 = (2) \times (2) \times 5 \times 5$$

$$92 = (2) \times (2) \times 23$$

$$\text{GCF} = (2) \times (2) = 4$$

$$\text{h) } 4 = (2) \times (2)$$

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

$$\text{GCF} = (2) \times (2) = 4$$

$$\text{i) } 75 = 3 \times (5) \times (5)$$

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

$$\text{GCF} = (5) \times (5) = 25$$

$$\text{j) } 72 = (2) \times (2) \times (2) \times 3 \times 3$$

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

$$\text{GCF} = (2) \times (2) \times (2) = 8$$