# Greatest Common Factor (E)

Name: _____

Date: _____

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

a) $124 = ②×②×31$

   $204 = ②×②×3×17$

   $\text{GCF} = ②×② = 4$

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

Name: _____

Date: _____

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

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

$\phantom{a)} 204 = (2) \times (2) \times 3 \times 17$

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

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

$\phantom{b)} 68 = (2) \times (2) \times 17$

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

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

$\phantom{c)} 4 = (2) \times (2)$

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

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

$\phantom{d)} 188 = (2) \times (2) \times 47$

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

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

$\phantom{e)} 268 = (2) \times (2) \times 67$

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

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

$\phantom{f)} 366 = (2) \times (3) \times 61$

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

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

$\phantom{g)} 44 = (2) \times (2) \times 11$

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

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

$\phantom{h)} 196 = (2) \times (2) \times 7 \times 7$

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

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

$\phantom{i)} 392 = (2) \times (2) \times 2 \times (7) \times 7$

$\phantom{i)} \text{GCF} = (2) \times (2) \times (7) = 28$

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

$\phantom{j)} 308 = (2) \times (2) \times 7 \times 11$

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