## Greatest Common Factor (J)

Name:
Date: $\qquad$
Use the prime factors of the numbers in each set to calculate the greatest common factor.
a) $172=$ (2) $2 \times 43$
b) 132
$164=(2) \times 2 \times 41$
114

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

c) 116 316
e) 400

360
f) 318

234
g) 290
h) 320

50
368
i) 300

368
j) 130

190

## Greatest Common Factor (J) Answers

Name: $\qquad$ Date: $\qquad$
Use the prime factors of the numbers in each set to calculate the greatest common factor.
a) $172=$ (2) $\times(2) \times 43$
b) $132=(2) \times 2 \times(3) \times 11$
$164=(2) \times(2) \times 41$
GCF $=(2) \times(2)=4$

$$
\begin{aligned}
& 114=(2) \times(3) \times 19 \\
& \mathrm{GCF}=(2) \times(3)=6
\end{aligned}
$$

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

$$
\text { f) } \begin{aligned}
318 & =(2) \times(3) \times 53 \\
234 & =(2) \times(3) \times 3 \times 13 \\
\text { GCF } & =(2) \times(3)=6
\end{aligned}
$$

g) $290=(2) \times(5) \times 29$
h) $320=(2) \times(2) \times(2) \times(2) \times 2 \times 2 \times 5$
$50=(2) \times 5) \times 5$
GCF $=(2) \times(5)=10$

$$
\begin{aligned}
& 368=(2) \times(2) \times(2) \times(2) \times 23 \\
& G C F=(2) \times(2) \times(2) \times(2)=16
\end{aligned}
$$

i) $300=$ (2) $\times$ (2) $\times 3 \times 5 \times 5$
$368=$ (2) $\times$ (2) $\times 2 \times 2 \times 23$
GCF $=(2) \times(2)=4$

$$
\text { j) } \begin{aligned}
130 & =(2) \times(5) \times 13 \\
190 & =(2) \times(5) \times 19 \\
\text { GCF } & =(2) \times(5)=10
\end{aligned}
$$

