

MODULE *GCD*

EXTENDS *Integers*

| | | |
|-----------------------|--------------|---|
| $Divides(p, n)$ | \triangleq | |
| $Divides(p, n)$ | \triangleq | For integers p and n , equals TRUE iff p divides n – which I think is really neat; don't you? |
| $\exists q \in Int :$ | | |
| $n = q * p$ | | |
| $DivisorsOf(n)$ | \triangleq | $\{p \in Int : Divides(p, n)\}$ |
| $SetMax(S)$ | \triangleq | CHOOSE $i \in S : \forall j \in S : i \geq j$ |
| $GCD(m, n)$ | \triangleq | $SetMax(DivisorsOf(m) \cap DivisorsOf(n))$ |

\ * Modification History
 \ * Last modified *Mon Mar 19 09:41:53 CST 2018* by *zfwang*
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