

```
Euler \phi function gcd1\{n\} ::= \{k \in [0,n) \mid gcd(k,n)=1\} gcd1\{7\} = \{1,2,3,4,5,6\} gcd1\{12\} = \{0,1,2,3,4,5,6,7,8,9,10,11\}
```

```
Euler \phi function

gcd1{n} ::=

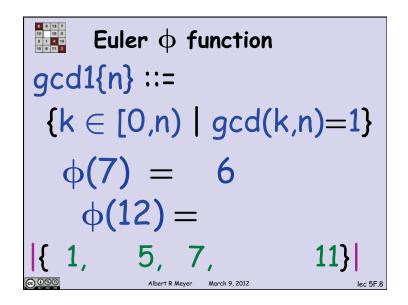
{k \in [0,n) \mid gcd(k,n)=1}

\phi(7) = |\{1,2,3,4,5,6\}|

gcd1{12} =

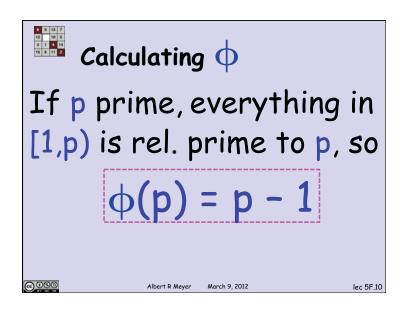
{0,1,2,3,4,5,6,7,8,9,10,11}
```

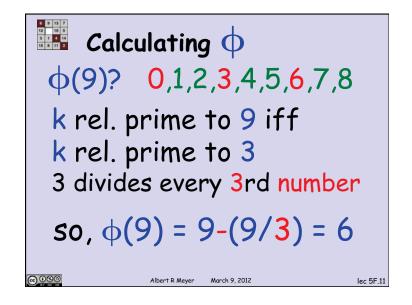
```
Euler \phi function \gcd(\{n\}) := \{k \in [0,n) \mid \gcd(k,n)=1\} \phi(7) = 6 \gcd(\{12\}) = \{0,1,2,3,4,5,6,7,8,9,10,11\}
```

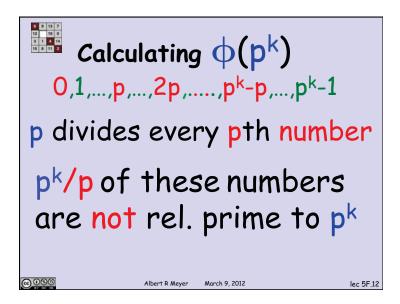


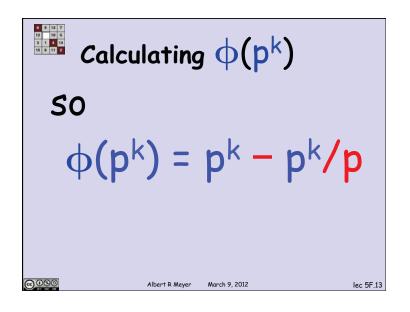
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Euler \phi function

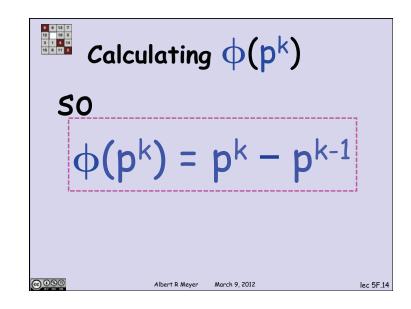
gcd1\{n\} ::=
\{k \in [0,n) \mid gcd(k,n)=1\}
\phi(7) = 6
\phi(12) = 4
```

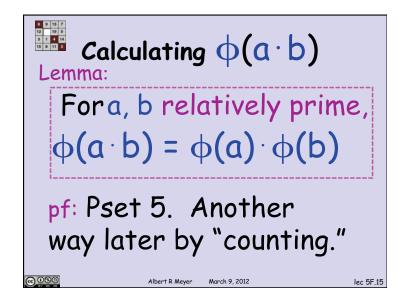


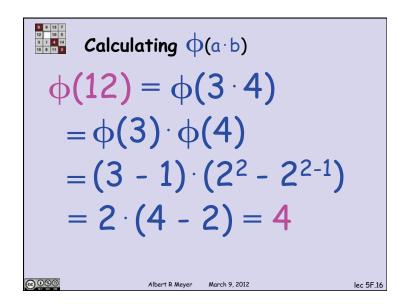


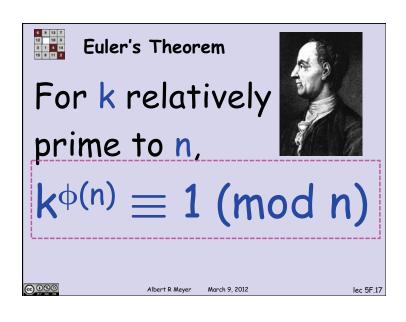












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