The operation table below for $*$ makes the set $G = \{m, n, o, p, q, r\}$ into a group. Find the missing entries, justifying your answers:

$*$	m	n	o	p	q	r
m	m	n	o	p	q	r
n	$\boxed{1}$	p	q	$\boxed{3}$	r	o
o	$\boxed{2}$	r	m	$\boxed{5}$		$\boxed{6}$
p		$\boxed{4}$	r			
q			n			
r		q	p			