1. $r(10)=c * 10 * 10=15$ so $c=15 / 100=.15$ so $r(50)=c * 50 * 50=(15 / 100) * 2500=15 * 25=375$ Or solve it this way: $r(50) / r(10)=(c * 50 * 50) /(c * 10 * 10)=25$ so $r(50)=25 * r(10)=25 * 15=375$ $n \leq 1 / n$

$$
(3+1)=4
$$

$$
4
$$

$$
\leq
$$

2. position
player-to-move any earlier position

3. John Nash (or Piet Hein)
adding stones, no draws
Claude Shannon
all four
4. the second diagram in http://webdocs.cs.ualberta.ca/~hayward/396/hexnotesp1.pdf has a winning White virtual connection "spider diagram"
below, in each diagram: marked stones are captured, small dots show Black mustplay

(intersection of these two mustplays leaves mustplay size one: do you see Black's forced move?)
