Aspect ratio test slide

This should be a square.

If this is a square, these slides have been stretched from 4:3 to 16:9.
MENACE

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Write for us!
Deadline for issue 05 articles is 3 December.

contact@chalkdustmagazine.com
Donald Michie
MENACE
MENACE

Machine Educable Noughts And Crosses Engine
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MENACE

Lose → -1 bead
MENACE

Lose → -1 bead
MENACE

Lose → -1 bead
MENACE

Lose → -1 bead
Win → +3 beads
MENACE

Lose → -1 bead
Win → +3 beads
Draw → +1 bead
MENACE
MENACE
Connect 4
Connect 4

- 4 531 985 219 092 possible positions
Connect 4

- 4,531,985,219,092 possible positions
- 104,371,619 m$^3$ of matchboxes
Connect 4

- 4,531,985,219,092 possible positions
- 104,371,619 m³ of matchboxes
Connect 4

- 4531985219092 possible positions
- 104371619m³ of matchboxes
Chess
Chess

- Around $10^{43}$ possible positions
Chess

- Around $10^{43}$ possible positions
- Around $10^{38} \text{m}^3$ of matchboxes
Chess

- Around $10^{43}$ possible positions
- Around $10^{38} \text{m}^3$ of matchboxes
Chess

- Around $10^{43}$ possible positions
- Around $10^{38} m^3$ of matchboxes
Chess

- Around $10^{43}$ possible positions
- Around $10^{38} \text{m}^3$ of matchboxes
Go (19 by 19)
Go (19 by 19)
Go (19 by 19)

- Estimated $10^{170}$ possible positions
Go (19 by 19)

- Estimated $10^{170}$ possible positions
- Estimated $10^{165} \text{m}^3$ of matchboxes
Go (19 by 19)

- Estimated $10^{170}$ possible positions
- Estimated $10^{165} \text{m}^3$ of matchboxes
Go (19 by 19)

- Estimated $10^{170}$ possible positions
- Estimated $10^{165} \text{m}^3$ of matchboxes
Go (19 by 19)

- Estimated $10^{170}$ possible positions
- Estimated $10^{165} \text{m}^3$ of matchboxes

The observable universe
mscroggs.co.uk/menace
This page contains MENACE: a Machine Educable Noughts And Crosses Engine. MENACE was first built by Donald Michie in 1960 using 304 matchboxes. You can read about how MENACE works here.

You can play against MENACE below. As you play against it, it will learn to be a better player.

You can find the source code for this implementation on GitHub.

MENACE Wins: 1
Draws: 0
Human Wins: 4

MENACE wins.
You win.
You win.
You win.
You win.
Thank-you for listening!

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