**Kool / Võistkond: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Matemaatika/loogika**

**Ülesanne 4 Punkte: max 4p/……………**

Teil on kasutada Ozobot’i robot ning lisaks võite kasutada oma telefoni stopperit.

Ozobot’i sisse ja välja lülitamiseks vajuta lühidalt roboti küljel asuvathttps://lh5.googleusercontent.com/rTipcEX9GJkMqvXkgyzXNHjGisCo6gpZM_07Jcj1YXLW57EOOZCL6nvlxfDmGQtnvNnDpLe8NM2mhtlRMKHM58iHK1Ts0iQ0xjZ-yHRe7FKXRb7cAIm9O_YJXg4z-hRJTti1d_zCnuppu.

Enne alustamist kalibreerige järgmise juhendi abil oma Ozoboti robotid:

|  |
| --- |
| https://lh4.googleusercontent.com/luNgm7hD8CsidnvzouVq6AeH_KmClf3TkWzf2sBepebTF8t5nbo-mcrQPCd6OkXitYhmhbX3PkJ5FP2IiBMsx0R_g3buOLOhV-lXHhibM7AjHHvBwo8Xx9eipSJnWGzb74U-n8kwOptimaalseks toimimiseks tuleb Ozobot’i enne igat kasutuskorda vastaval mängualusel kalibreerida.   1) Hoia sisselülitus-nuppu 2 sekundi jooksul all seni, kuni Ozobot’i LED hakkab valge värviga vilkuma.  2) Lase nupp lahti ja aseta Ozobot mustale ringile.  3) Õnnestunud kalibreerimisest annab Ozobot märku sinise tule, edasi liikumise, rohelise tule ja väljalülitumisega. Kui Ozobot vilgub punaselt, alusta kalibreerimist uuesti.  4) Ozobot’i peab peale kalibreerimist uuesti sisse lülitama. |

On antud 6 Ozobot’i roboti liikumisrada (A, B, C, D, E ja F).

Selgita, millise raja läbimiseks kulub Ozobot’i robotil kõige vähem aega ja millise raja läbimiseks kulub Ozobot’i robotil kõige rohkem aega.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | B |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | D |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | E |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | F |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

1. Kõige vähem aega kulub robotil raja \_\_\_\_\_\_ läbimiseks.
2. Kõige rohkem aega kulub robotil raja \_\_\_\_\_\_ läbimiseks.