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| There seems to be a relationship between how hungry a praying mantis (also called a “mantid”) is and the distance at which the praying mantis will strike (jump) at prey. Here are some data for 15 mantids presented in GAIMME (Guidelines for Assessment & Instruction in Mathematics Modeling Education) that can be explored to investigate this relationship. *Based on these data, can you find a function that predicts the distance a praying mantis will strike based on how much food is in its stomach?*   |  |  | | --- | --- | | Food in stomach in centigrams (cg) | Striking distance in millimeters (mm) | | 11 | 65 | | 18 | 52 | | 23 | 44 | | 31 | 42 | | 35 | 34 | | 40 | 23 | | 53 | 23 | | 59 | 8 | | 66 | 4 | | 70 | 0 | | 72 | 0 | | 75 | 0 | | 86 | 0 | | 90 | 0 | |
| The GAIMME report is available here:  http://www.siam.org/Portals/0/Publications/Reports/gaimme-full\_color\_for\_online\_viewing.pdf?ver=2018-03-19-115454-057 |