**Homework A.1 – 2D Marine Seismic Geometry**

Given the following 2D marine seismic geometry configuration:

* Near trace number = 1
* Far trace number = 96
* Shot interval = 25 m
* Group interval = 25 m
* Near offset = 85 m
* First shot = 101, last shot = 1001
* First CDP = 1

**Determine the geometry based on this seismic configuration:**

1. What is the mid-point spacing?
2. What is the nominal (full) fold achieved with this configuration?
3. Assuming the first mid-point on the line is numbered 1001, at which mid-point is the nominal (full) fold reached?
4. What is the offset increment within a mid-point?
5. What is the total number of mid-points along the line?
6. How many traces are within a mid-point for the full-fold CDP?

**Answer key A.1**

* 1. What is the mid point-spacing?

Mid-point spacing/CDP interval =

* 1. What is the nominal (full) fold achieved with this configuration?

Full-fold =

* 1. Assuming the first mid-point on the line is numbered 1, at which mid-point is the nominal (full) fold reached?
* First CDP full-fold =
* If the first mid-point on the line is numbered 1001, so full-fold mid-point at number 95
  1. What is the offset increment within a mid-point?

Offset increment within CDP =

* 1. What is the total number of mid-points along the line?

Number of CDP in the line

=

=

=

* 1. How many traces are within a mid-point for the full-fold CDP?

Traces within a mid-point for the full-fold CDP =