# Section 0. - Outline

We aim to investigate several “classes” of solutions to test our code. In each of -, -, and -, we will construct solutions of the following forms:

1. Constant
2. Linear (shallow slope)
3. Shallow gradient
4. Steep gradient

For ease of construction, we will use a and of a similar form to the solution and a phase function of the form

.

The -parts of will be one of

1. ;
2. ;
3. , or;
4. .

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1. ;
2. ;
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4. .

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# Section 1. – Problem 000

# Section 2. – Problem 001

# Section 3. – Problem 002

# Section 4. – Problem 003

# Section 5. – Problem 010