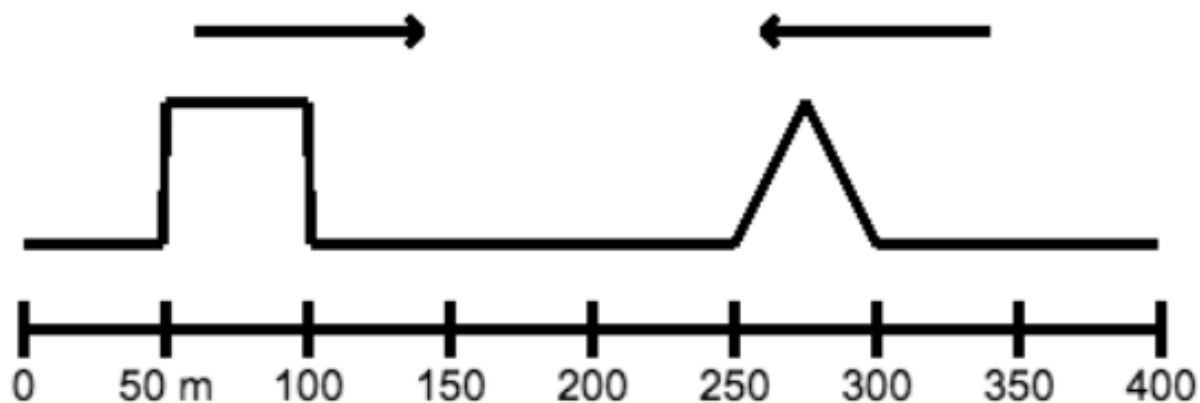


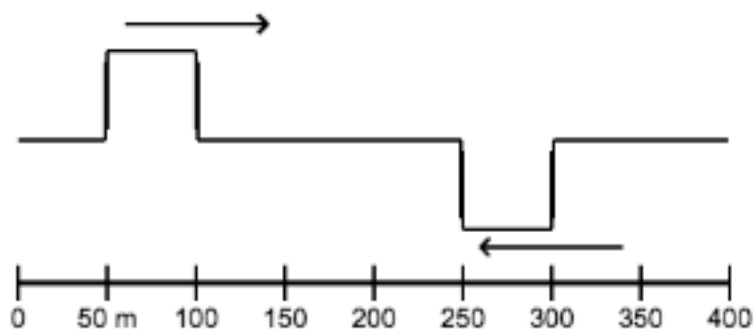
**Problem 1:** A box wave and a triangle wave approach each other like this:



The waves will constructively interfere and create a pattern by overlapping each other. Place the following pictures in order:

<p>A.</p>	<p>E.</p>
<p>B.</p>	<p>F.</p>
<p>C.</p>	<p>G.</p>
<p>D.</p>	<p>H.</p>

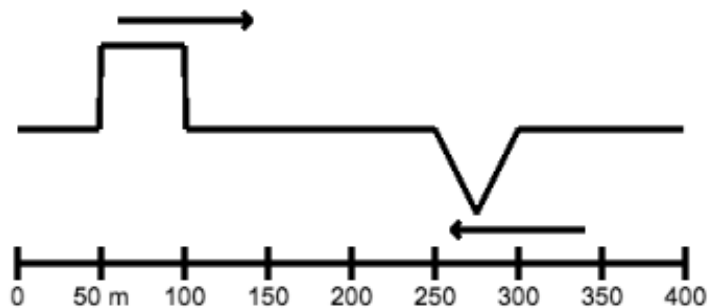
**Problem 2:** Two oppositely aligned box waves approach each other:



They will destructively interfere. Place the following pictures in order:

<p>A.</p>	<p>E.</p>
<p>B.</p>	<p>F.</p>
<p>C.</p>	<p>G.</p>
<p>D.</p>	<p>H.</p>

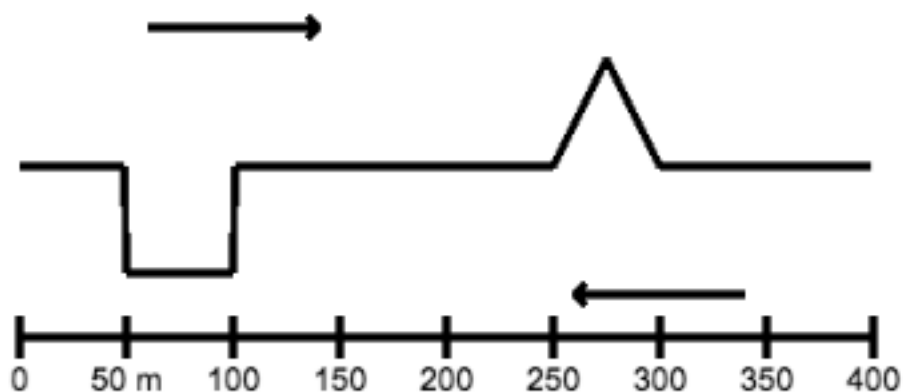
**Problem 3:** A positive box wave approaches a negative triangular wave.



They will destructively interfere and pass through each other. Place the following pictures in order:

<p>A.</p>	<p>E.</p>
<p>B.</p>	<p>F.</p>
<p>C.</p>	<p>G.</p>
<p>D.</p>	<p>H.</p>

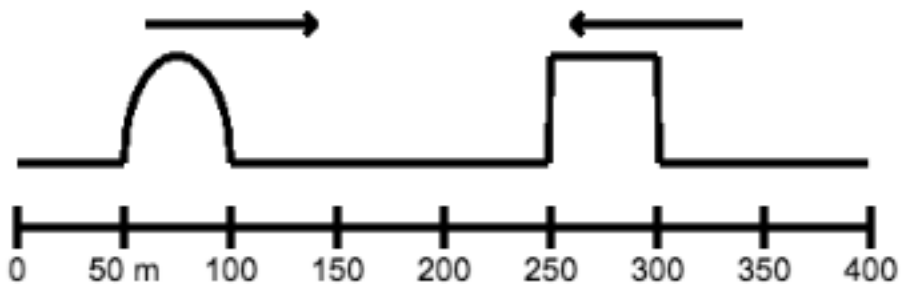
**Problem 4:** A negative box approaches a positive triangular wave.



They will destructively interfere and pass through each other. Place the following pictures in order:

<p>A.</p>	<p>E.</p>
<p>B.</p>	<p>F.</p>
<p>C.</p>	<p>G.</p>
<p>D.</p>	<p>H.</p>

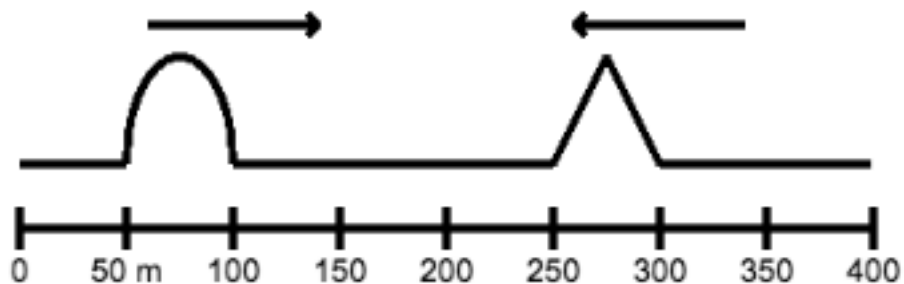
**Problem 5:** A round wave approaches a box wave:



They will constructively interfere. Place each of the following diagrams in order:

<p>A.</p>	<p>B.</p>
<p>C.</p>	<p>D.</p>
<p>E.</p>	<p>F.</p>
<p>G.</p>	<p>H.</p>

**Problem 6:** A round wave approaches a triangular wave.



They will constructively interfere. Place each of the following diagrams in order:

A. 	B. 
C. 	D. 
E. 	F. 
G. 	H. 

Answers

Problem 1:

B H C E D A G F

Problem 2:

G D E H B C A F

Problem 3:

D G E C F B H A

Problem 4:

C G E H A B F D

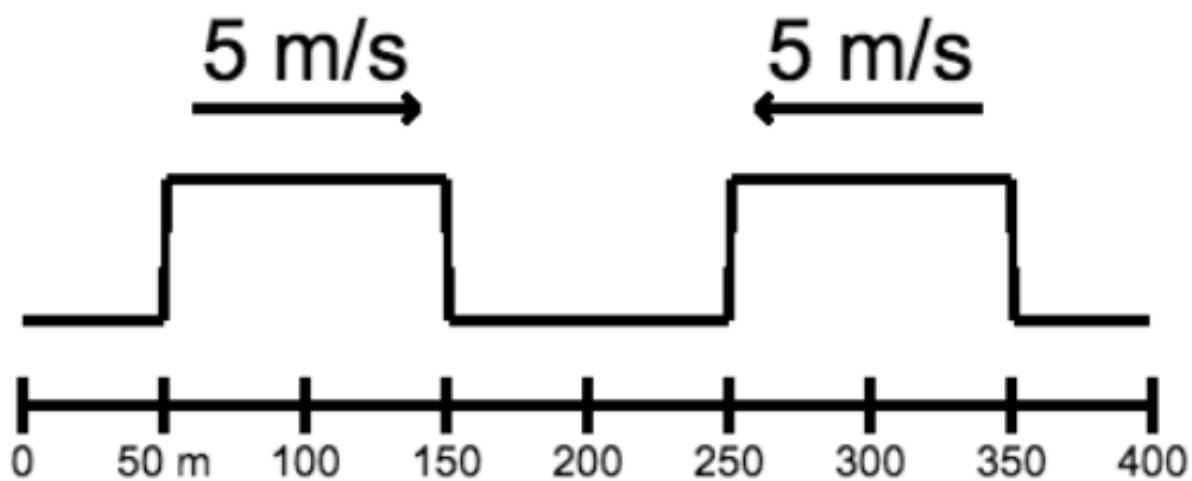
Problem 5:

C B D H F A G E

Problem 6:

E B G H C F D A

Two box waves are approaching each other.



This is the pattern they will make:

