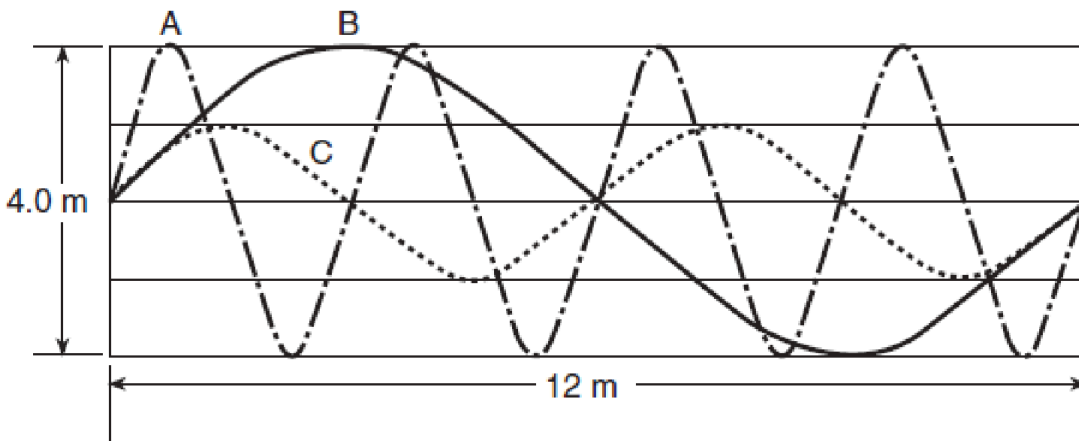


Problem set 2- Individual work only

NAME: _____

Number ___

Questions 2-5: Three waves A, B, and C travel 12 m through the same material, as shown in the diagram below. It takes all three waves 2.0 s to travel the 12 m shown in the diagram.



- Rank the waves by their amplitude, from largest to smallest. If two or more waves have the same amplitude, say so in your ranking.

Justification with a fact:

Ranking: largest amplitude _____ smallest amplitude

- Rank the waves by their speed, from largest to smallest. If two or more waves have the same speed, say so in your ranking.

Justification with a fact:

Ranking: largest speed _____ smallest speed

3. Rank the waves by their wavelength, from largest to smallest. If two or more waves have the same wavelength, say so in your ranking.

Justification with a fact:

Ranking: largest wavelength _____ smallest wavelength

4. Rank the waves by their frequency, from largest to smallest. If two or more waves have the same frequency, say so in your ranking.

Justification with an equation or calculation:

Ranking: largest frequency _____ smallest frequency

5. What is the frequency of a wave if its period is 0.25 s?

Justification with a calculation:

Answer: _____