Determine the range ambiguity function of a pulse given by \( \tilde{x}(t) = \begin{cases} t; & 0 \leq t \leq T_0 \\ 0; & \text{Otherwise} \end{cases} \)

\[ a. \chi(\tau) = \begin{cases} \frac{(T_0+\tau)^2}{3} - \frac{\tau(T_0+\tau)^2}{2} & -T_0 \leq \tau \leq 0 \\ \frac{T_0^3}{3} - \frac{T_0^2}{2} + \frac{T_0}{6} & 0 \leq \tau \leq T_0 \\ 0; & \text{Otherwise} \end{cases} \]

\[ b. \chi(\tau) = \begin{cases} \frac{(T_0+\tau)^2}{3} - \frac{\tau(T_0+\tau)^2}{2} & 0 \leq \tau \leq T_0 \\ \frac{T_0^3}{3} - \frac{T_0^2}{2} + \frac{T_0}{6} & -T_0 \leq \tau \leq 0 \\ 0; & \text{Otherwise} \end{cases} \]

\[ c. \chi(\tau) = \begin{cases} \frac{(T_0+\tau)^2}{3} + \frac{\tau(T_0+\tau)^2}{2} & 0 \leq \tau \leq 0 \\ \frac{T_0^3}{3} + \frac{T_0^2}{2} - \frac{T_0}{6} & -T_0 \leq \tau \leq 0 \\ 0; & \text{Otherwise} \end{cases} \]
2) Determine the value of the range ambiguity function for the pulse given in Q1 at \( \tau = 0 \) and \( \tau = T_0 \):

a. \( \chi(0) = -\frac{r_0^3}{3} \) and \( \chi(T_0) = 0 \)
b. \( \chi(0) = 0 \) and \( \chi(T_0) = \frac{r_0^3}{3} \)
c. \( \chi(0) = \frac{r_0^3}{3} \) and \( \chi(T_0) = 0 \)
d. \( \chi(0) = 0 \) and \( \chi(T_0) = 0 \)

No, the answer is incorrect.
Score: 0
Accepted Answers:

3) [Quiz: Week 8 Assignment 8 (assessment? name=78)]

No, the answer is incorrect.
Score: 0
Accepted Answers:

4) [Feedback For Week 8 (unit? unit=72&lesson=94)]

No, the answer is incorrect.
Score: 0
Accepted Answers:

5) [Quiz: Week 8 Assignment 8 (assessment? name=78)]

No, the answer is incorrect.
Score: 0
Accepted Answers:
No, the answer is incorrect. 
Score: 0
Accepted Answers: 
b.

6)  
1 point

a.
b.
c.
d.

No, the answer is incorrect. 
Score: 0
Accepted Answers: 
b.

7)  
1 point

a.
b.
c.
d.

No, the answer is incorrect. 
Score: 0
Accepted Answers: 
c.

8)  
1 point

a.
b.
c.
d.

No, the answer is incorrect. 
Score: 0
Accepted Answers: 
a.

9)  
1 point

a.
b.
c.
d.

No, the answer is incorrect. 
Score: 0
Accepted Answers: 
c.

10)  
1 point

a.
b.
c.
d.
No, the answer is incorrect.
Score: 0
Accepted Answers:
b.