Week 6 Quiz

Question 1

$$\frac{dy}{dx} = \frac{1}{4}$$

Question 2.

20π ft^2/min.

Question 3.

$\frac{5}{16}$ in/sec.

Question 4

0.09

Question 5

$$\frac{1}{s}\frac{ds}{dt} = \frac{2}{3w}\left(\frac{dw}{dt}\right)$$

Question 6.

(a) $-\frac{1}{2}$ OR $\frac{1}{2}$

(b) Since the demand is inelastic, an increase in price will ~~decrease the~~ increase the total revenue.

Question 7

(a) -1 OR 1

(b) Since the demand is unitary there will be no change in revenue when price increases.

Question 8.

(a) -8164.80

(b) ~~Elastic~~ Demand is elastic.

(c) An increase in price decreases revenue.

Question 9.

54

Question 10.

~~$ 41.01 416.18~~ = $416.2

~~39120.9~~ Tax revenue:

39120.9