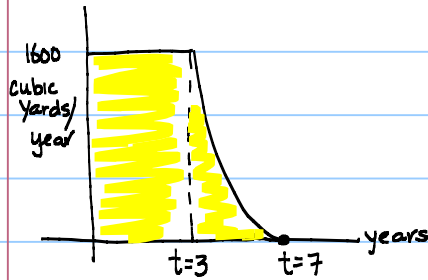


Answers: Worksheet (Applying Fundamental Theorem)

Note Title

11/05/2012

1 a)



b) $t = 7$ years

$$c) 3(16) + \int_3^7 F'(t) dt$$

$$= 48 + 21.\bar{3} = 69.\bar{3} \text{ cubic yards}$$

$$2) \int_0^5 v(t) dt = 312.5 \text{ feet}$$

$$3) 250 + \int_1^{11} \sqrt{36+t} dt \doteq 250 + 64.77 \doteq 314.769 \text{ thousand dollars}$$

$$4) \int_0^{12} \left(-\frac{1}{2}t \sin(2t) + \frac{1}{4}t - 3\right) dt \doteq -16.6 \text{ thousand dollars}$$