

Ferris Wheels

Name _____

Heidi is riding a Ferris wheel.

Her height above ground at time t is given by the function $H(t)$.

Provide a sketch of what $H(t)$ might look like.



Alta is riding a different Ferris wheel at the amusement park.

Her height above the ground is given by $A(t)$.

For each of the following symbolic statements, write an English sentence:

- 1) Comparing Alta's and Heidi's motions.
- 2) Noting differences in the two Ferris wheels.

A. $A(t) = H(t)$

B. $A(t) = 2H(t)$

C. $A(t) = -H(t)$

D. $A(t) = H(t + 3)$

E. $A(t) = \frac{1}{3}H(t) + 20$

F. $A(t) = H(2t)$

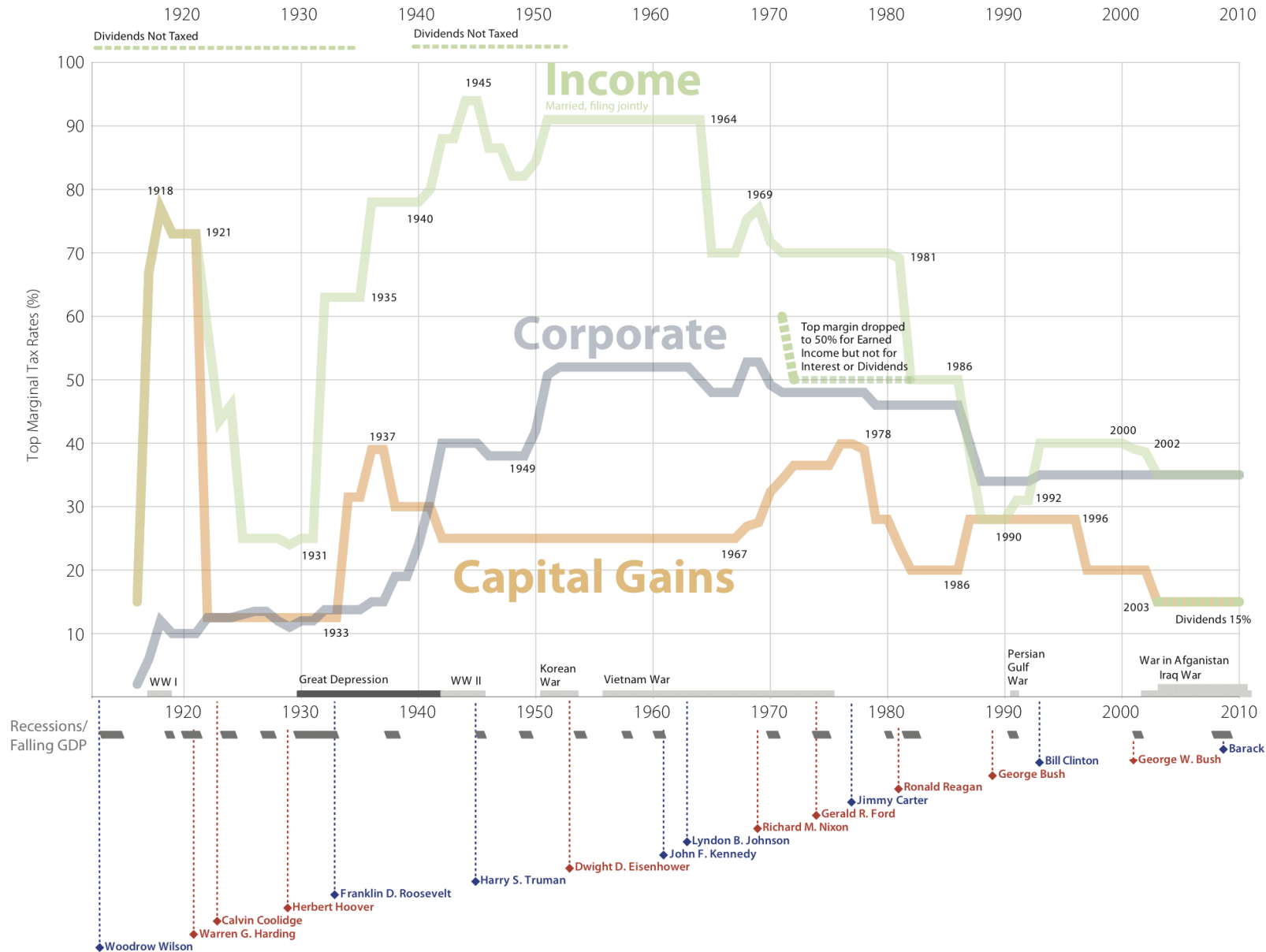
G. $A(t) = H(\frac{1}{4}t)$

H. $A(t) = H(\frac{2}{3}t)$

I. $A(t) = H(t) + \frac{1}{12}H(10t)$

Top Marginal Tax Rates: 1916-2010

Personal Income, Capital Gains and Corporate Tax Rates



Tax Graphs

Name _____

We have three functions $I(t)$, $C(t)$ and $G(t)$ for the three graphs Income, Corporate, and Capital Gains taxes.

What is $I(1960)$?

$G(2000)$?

$C(1800)$?

When is $G(t) = 30$?

When is $G(t) = C(t)$?

When is $C(t) < G(t)$?

When is $I(t) = C(t) + 5$?

When is $G(t) = G(t + 15)$?

When is $I(t) < I(t + 10)$?

Does $G(I(1980))$ make sense?