Turtle Tuesday, Sept. 6 | Weasel Wednesday, Sept. 7

Warm up: TTYN re. how much you would charge to sell a cupcake that cost you $1.00 to make. How much would you be willing to pay for a bagel if you could make your own bagels for $3.00?

Learning targets: I can explain how trade based on specialization can lead to increased consumption. I can calculate comparative advantage using <u>input</u> data. I can calculate acceptable terms of trade using opportunity costs. (Topic 1.3)

Homework 1c due today! If you wrote it out by hand, please get it out to show me.

**Google Slides for each week are linked in Canvas.**

FUN Set 1.2 Review . . .

32. Before specialization and trade, the domestic opportunity cost of producing 1 ton of grain in Alpha and in Beta is which of the following?

	Alpha	Beta
(A)	1 ton of steel	1 ton of steel
(B)	1 ton of steel	2 tons of steel
(C)	2 tons of steel	1 ton of steel
(D)	1 ton of steel	0.5 ton of steel
(E)	0.33 ton of steel	1.5 tons of steel

GRAIN (IN TONS)

30

10

Alpha

Beta

0   20   30

STEEL (IN TONS)

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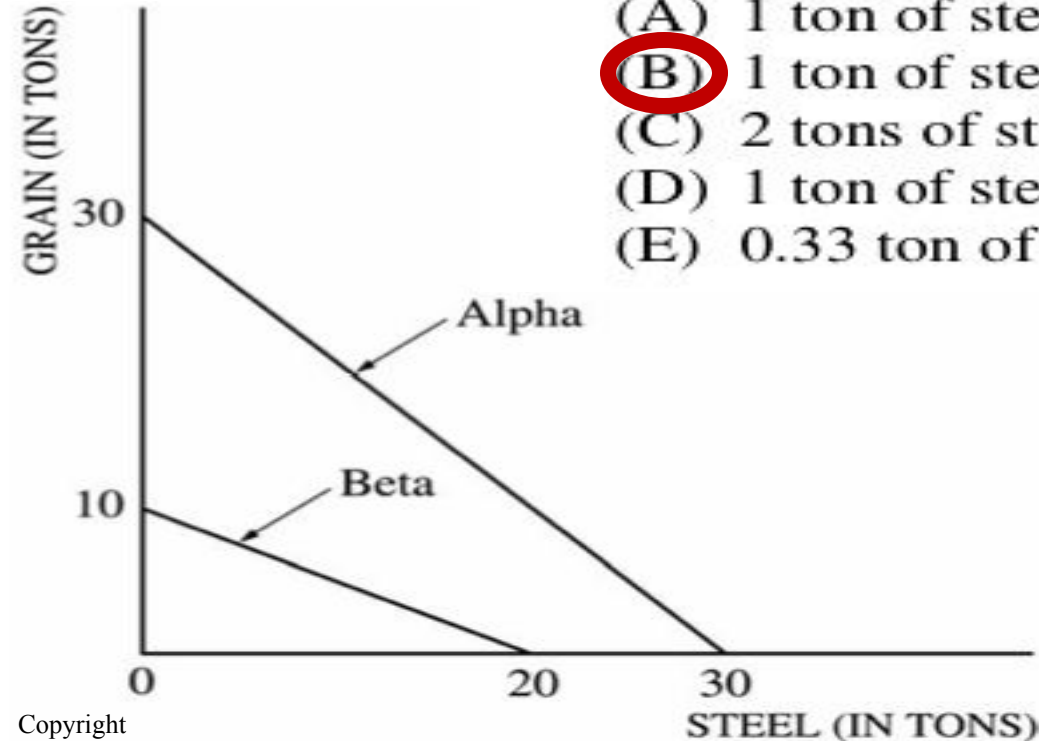
33. The theory of comparative advantage implies that Alpha would find it advantageous to

(A) export grain and import steel
(B) export steel and import grain
(C) export both grain and steel and import nothing
(D) import both grain and steel and export nothing
(E) trade 1 ton of grain for 0.5 ton of steel

2008 Audit Exam
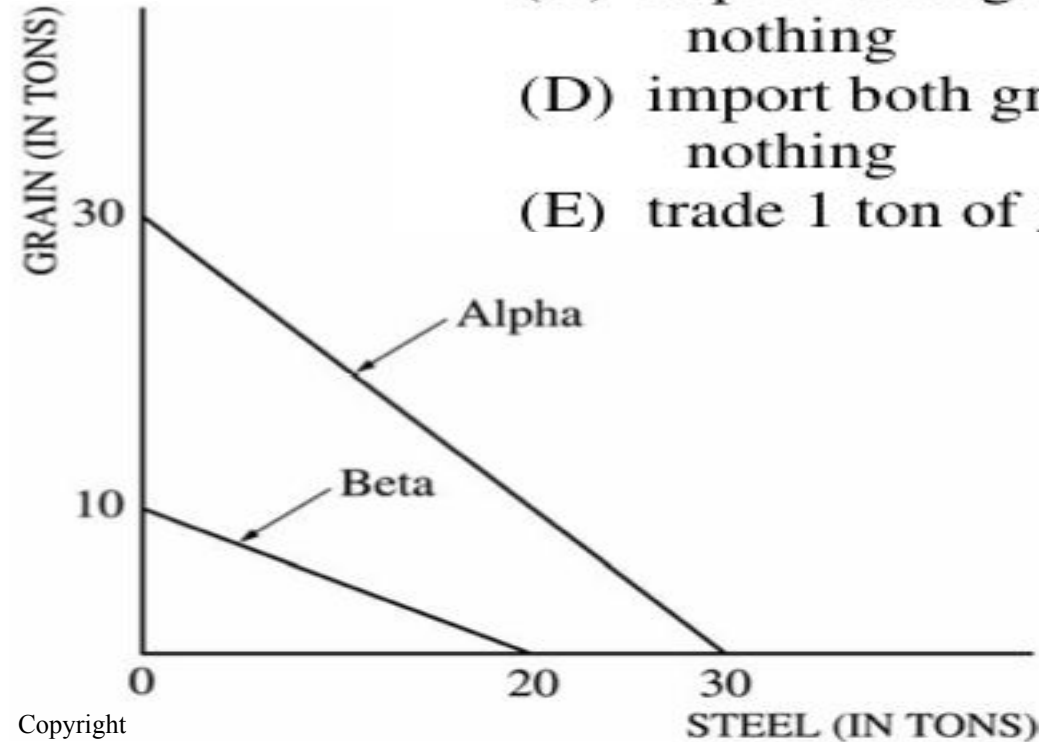
26. The table below shows the production alternatives of Country A and Country B for producing computers and cars with equal amounts of resources that are fully and efficiently employed.

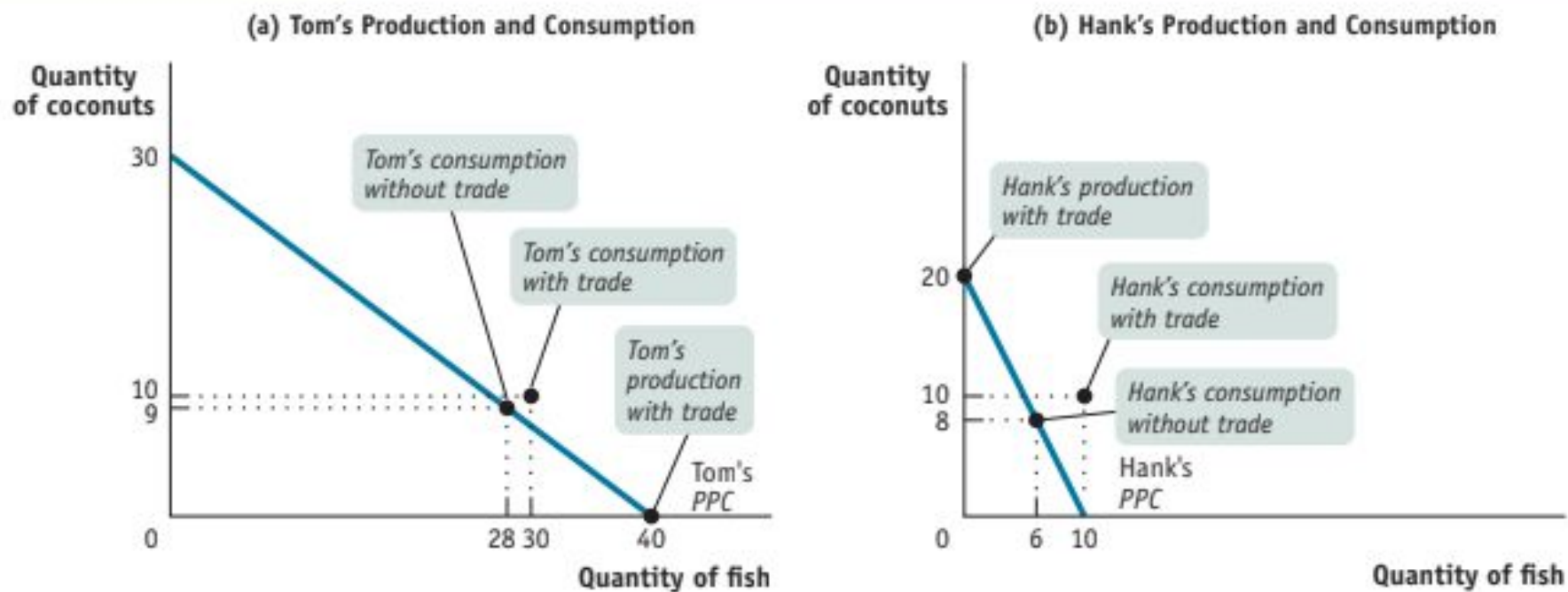| Country	Computers	Cars
A	24	0
	0	12
B	45	0
	0	15

Which of the following is true according to the data in the table?

(A) Country A has an absolute and comparative advantage in the production of computers.
(B) Country B has an absolute and comparative advantage in the production of computers.
(C) Country B should import computers and export cars.
(D) Since Country B has an absolute advantage in the production of both goods, it will not trade with Country A.
(E) Neither country can benefit from trade.

Learning target: I can explain how trade based on specialization can lead to increased consumption. (Topic 1.3)

figure 4.2 — Comparative Advantage and Gains from Trade

(a) Tom's Production and Consumption

Quantity of coconuts

- Tom's consumption without trade
- Tom's consumption with trade
- Tom's production with trade
- Tom's PPC

30

10
9

0   28 30   40

Quantity of fish

(b) Hank's Production and Consumption

Quantity of coconuts

- Hank's production with trade
- Hank's consumption with trade
- Hank's consumption without trade
- Hank's PPC

20

10
8

0   6 10

Quantity of fish

By specializing and trading, the two castaways can produce and consume more of both goods. Tom specializes in catching fish, his comparative advantage, and Hank—who has an *absolute* disadvantage in both goods but a *comparative* advantage in coconuts—specializes in gathering coconuts. The result is that each castaway can consume more of both goods than either could without trade.

How the Castaways Gain from Trade

		Without Trade		With Trade		Gains from Trade
		Production	Consumption	Production	Consumption	
Tom	Fish	28	28	40	30	+2
	Coconuts	9	9	0	10	+1
Hank	Fish	6	6	0	10	+4
	Coconuts	8	8	20	10	+2

50. If two nations specialize according to the law of comparative advantage and then trade with each other, which of the following would be true?

(A) A smaller number of goods would be available in each trading nation.

(B) Total world production of goods would decrease.

(C) Everyone within each nation would be better off.

(D) Each nation would increase its consumption possibilities.

(E) One nation would gain at the expense of the other nation.

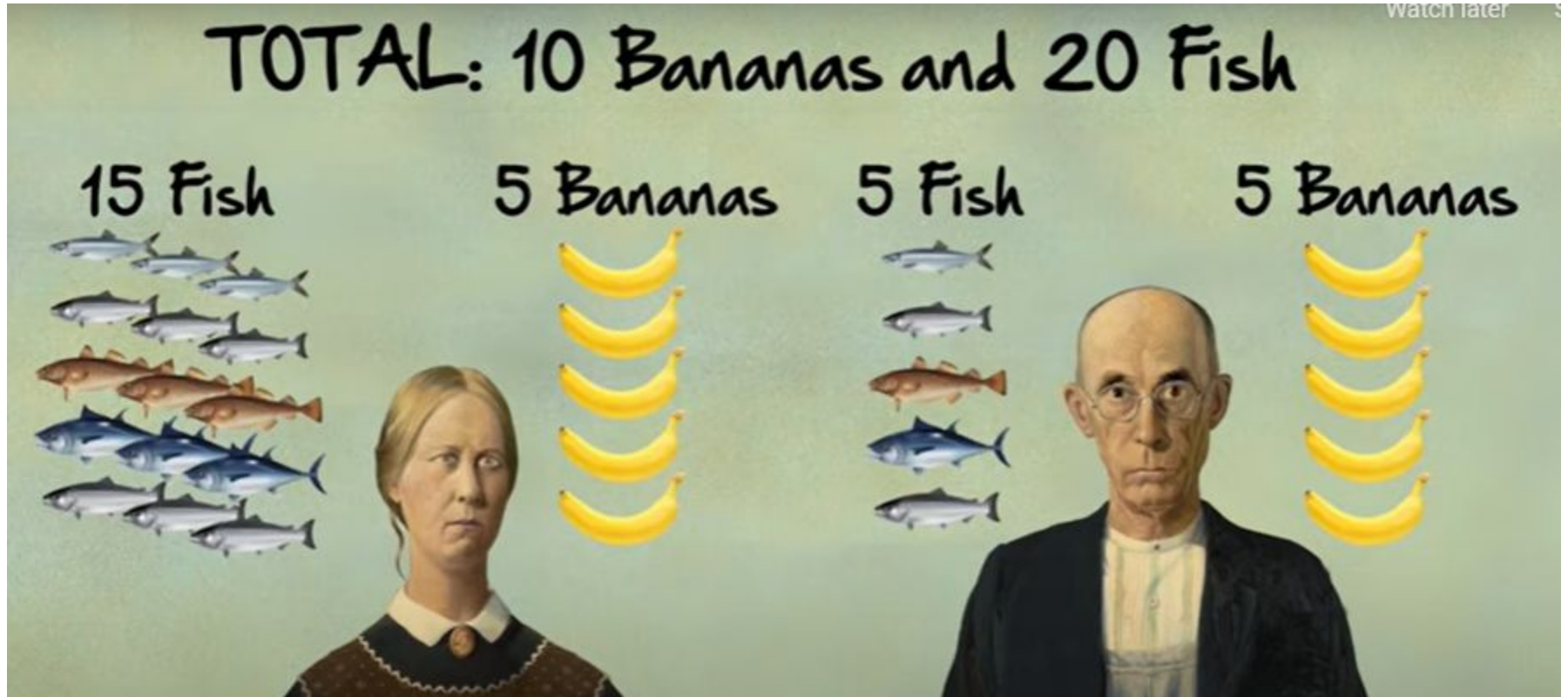*Learning target: I can calculate acceptable terms of trade using opportunity costs. (Topic 1.3)*

Bob's Opportunity Cost
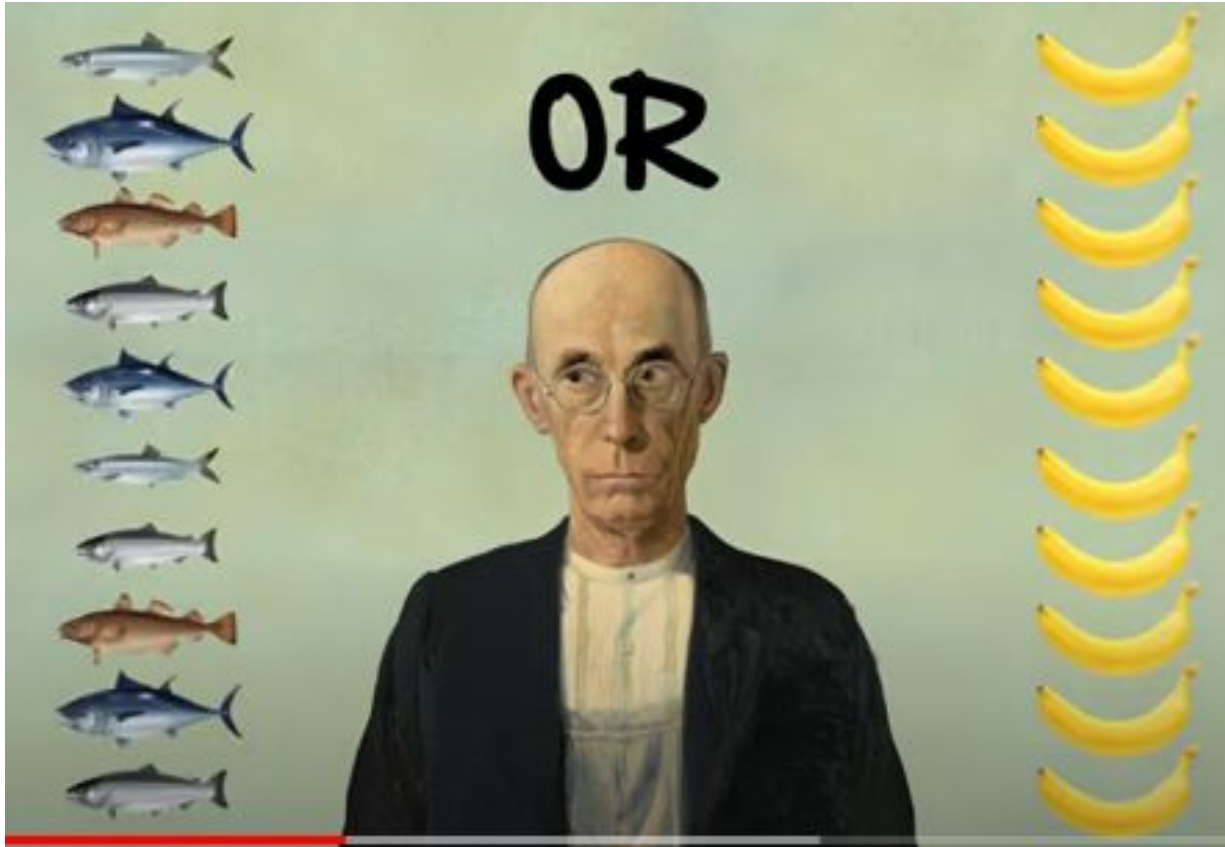
Ann's Opportunity Cost
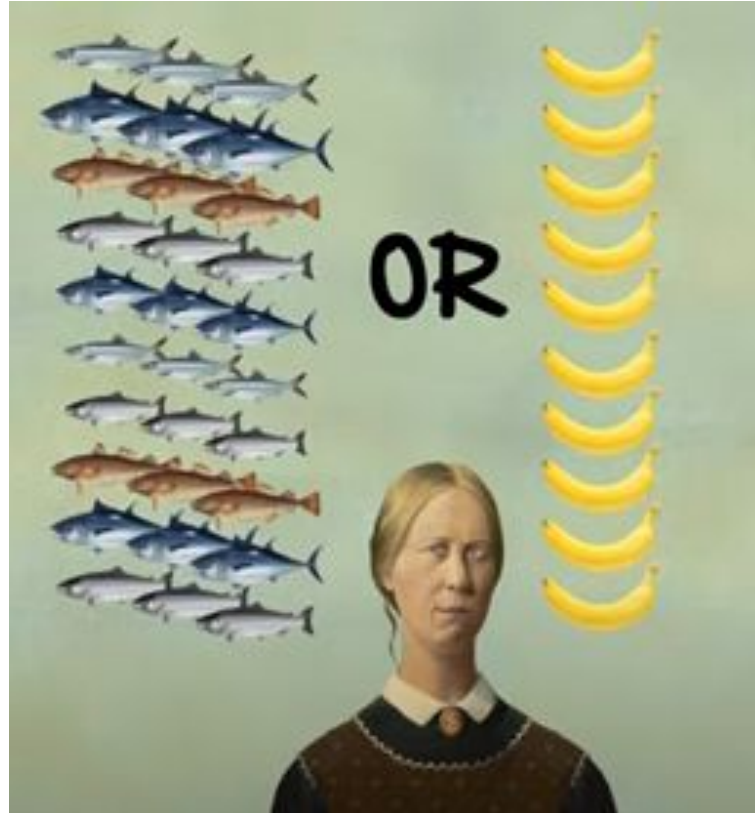
National consumption **without** trade

Who has comparative advantage?

National consumption **with** trade based on comparative advantage

TOTAL: 10 Bananas and **30** Fish

30 Fish

10 Bananas

What terms of trade would be beneficial?

Terms of Trade

Price of exports/price of imports x 100 = terms of trade

FUN Set 1.2 Review . . .

Now look at
- USA/Brazil Q. 7 on page 1
- Kenya/India Q. 7 on page 2
- Artland/Rayland (c) on page 2
- Question 34 on page 3
- Korea/Germany last question on page 4
- Japan/Brazil last question on page 4

	Wheat produced per one acre	Sugar produced per one acre
USA	30	30
Brazil	10	20

	Pineapples	Radios
Kenya	30	10
India	40	40

34. At what real exchange ratio, also referred to as the terms of trade, between grain (G) and steel (S) would both Alpha and Beta find it mutually advantageous to specialize and trade?
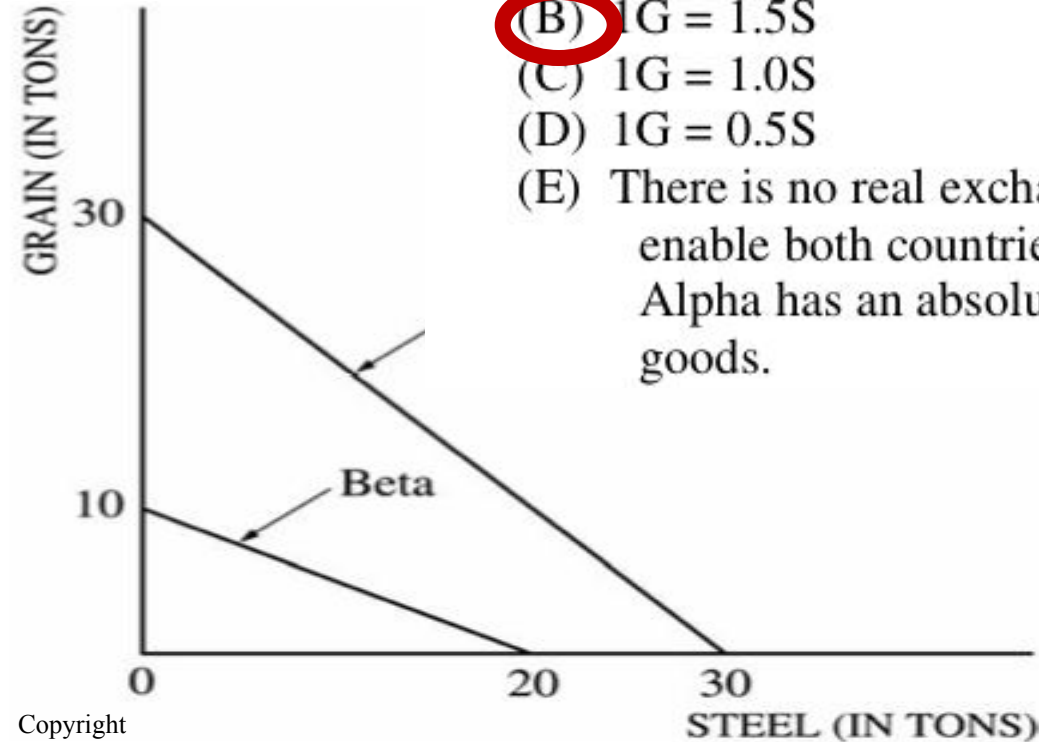
(A) 1G = 3.0S
(B) 1G = 1.5S
(C) 1G = 1.0S
(D) 1G = 0.5S
(E) There is no real exchange ratio that would enable both countries to benefit, since Alpha has an absolute advantage in both goods.

GRAIN (IN TONS)

30

Beta

10

0   20   30

STEEL (IN TONS)

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OUTPUT PER WORKER PER DAY		
Country	Units of Cloth	Units of Food
Newland	10	2
Beeland	10	1

3. The table above gives the production alternatives of two nations that are producing cloth and food, using equal amounts of resources.

(a) (i) Calculate the opportunity cost of producing a unit of cloth in Newland.

   (ii) Calculate the opportunity cost of producing a unit of food in Beeland.

(b) (i) Which nation has the comparative advantage in cloth production?

   (ii) Which nation has the comparative advantage in food production?

(c) Now assume that the productivity of Beeland's workers triples for each good.

   (i) Which country has a comparative advantage in food production?

   (ii) Explain how you determined your answer.

Question 3

6 points (2+2+2)

(a) 2 points:

       1 – One-fifth of a unit of food

       1 – 10 units of cloth

(b) 2 points:

       1 – Beeland

       1 – Newland

(c) 2 points:

       1 – Newland

       1 – The opportunity cost of producing food has not changed in Beeland

The following is an optional explanation of the answers to (b) and (c):

The opportunity cost of producing a unit of food in Newland is 5 units of cloth. The opportunity cost of producing a unit of food in Beeland is 10 units of cloth. Newland has a lower opportunity cost of producing food and thus a comparative advantage in food production.
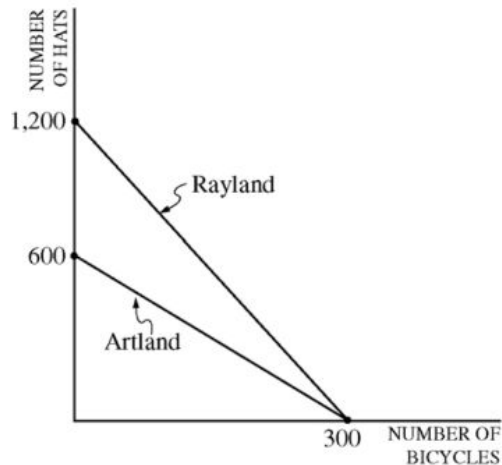
3. The diagram above shows the production possibilities curves for two countries: Artland and Rayland. Using equal amounts of resources, Artland can produce 600 hats or 300 bicycles, whereas Rayland can produce 1,200 hats or 300 bicycles.

(a) Calculate the opportunity cost of a bicycle in Artland.

(b) If the two countries specialize and trade, which country will import bicycles? Explain.

(c) If the terms of trade are 5 hats for 1 bicycle, would trade be advantageous for each of the following?

   (i) Artland

   (ii) Rayland

(d) If productivity in Artland triples, which country has the comparative advantage in the production of hats?

Question 3

6 points (1 + 2 + 2 + 1)

(a) 1 point:
- One point is earned for stating that the opportunity cost of a bicycle in Artland is 600/300 = 2 hats.

(b) 2 points:
- One point is earned for stating that Rayland will import bicycles.
- One point is earned for any one or more of the following explanations:

    Rayland has a comparative advantage in hats.

    Rayland has a comparative disadvantage in bicycles.

    Rayland has a lower opportunity cost in hats or higher opportunity cost in bicycles.

    Artland has a comparative advantage in bicycles.

    Artland has a comparative disadvantage in hats.

    Artland has a lower opportunity cost in bicycles or a higher opportunity cost in hats.
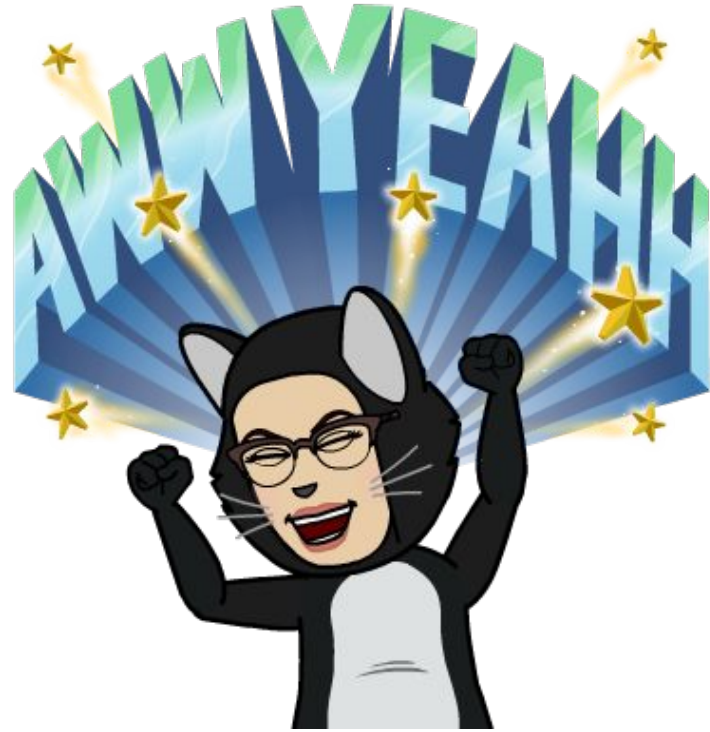
(c) 2 points:
- One point is earned for stating that it is advantageous for Artland.
- One point is earned for stating that it is NOT advantageous for Rayland.

(d) 1 point:
- One point is earned for stating that Rayland has a comparative advantage in producing hats.

	Cars	Motorcycles
Korea	3	9
Germany	4	8

	Laptops	Phones
Japan	4	12
Brazil	1	5

Economics is Fun!

How Much Fun is AP Macro with Ms. Brown?

So much fun you might drool . . .

Thursday, September 8 National School Picture Day Friday, September 9 National Teddy Bear Day

- Warm up: TTYN about what parts of Topic 1.3 (PPCs) you understand and what parts you are still working to understand? Put one list on one sticky and the other list on another.
- *Learning targets: Same as last class. (Topic 1.3)*
- Expect a unit 1 test the week of September 19

Seniors: Schedule your senior meeting!

**Counseling Website

**Go to the senior tab

**Set Appointment

I can calculate comparative advantage using <u>input</u> data.

The Input Method of calculating comparative adv.

- So far, we have used the "output method" in which we compare the amount of output two countries can get from the same amount of input. In other words, the variable we are examining is the output of each country.

Output Problem:

Production Possibilities Curves for Ted and Nancy
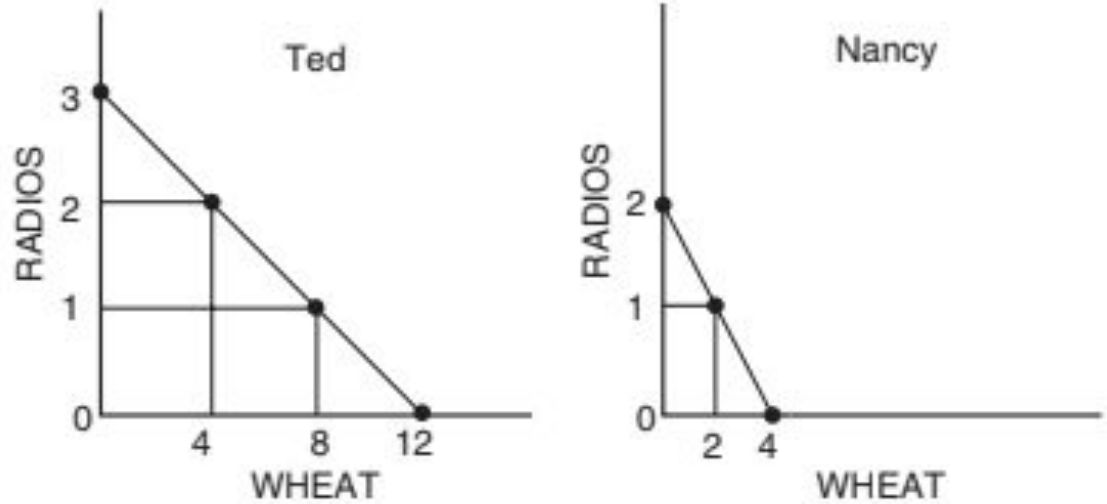
	Wheat in one hour	Radios in one hour
Ted	12	3
Nancy	4	2

The Input Method of calculating comparative adv.

- The "input method" compares the amount of inputs it takes two countries to get one unit of output. Here, the variable we examine is the inputs needed by each country.

**Input** problem: how many resources are required to produce one unit of output? Absolute and comparative adv.

Productivity Data Using the Input Method

	Time required to produce one radio	Time required to produce one bushel of wheat
Ted	20 minutes	5 minutes
Nancy	30 minutes	15 minutes

Input Problem

Labor Units Required to Produce Computers and Shirts in Mexico and the United States		
	1 Computer	1 Shirt
Mexico	12	2
United States	1	1
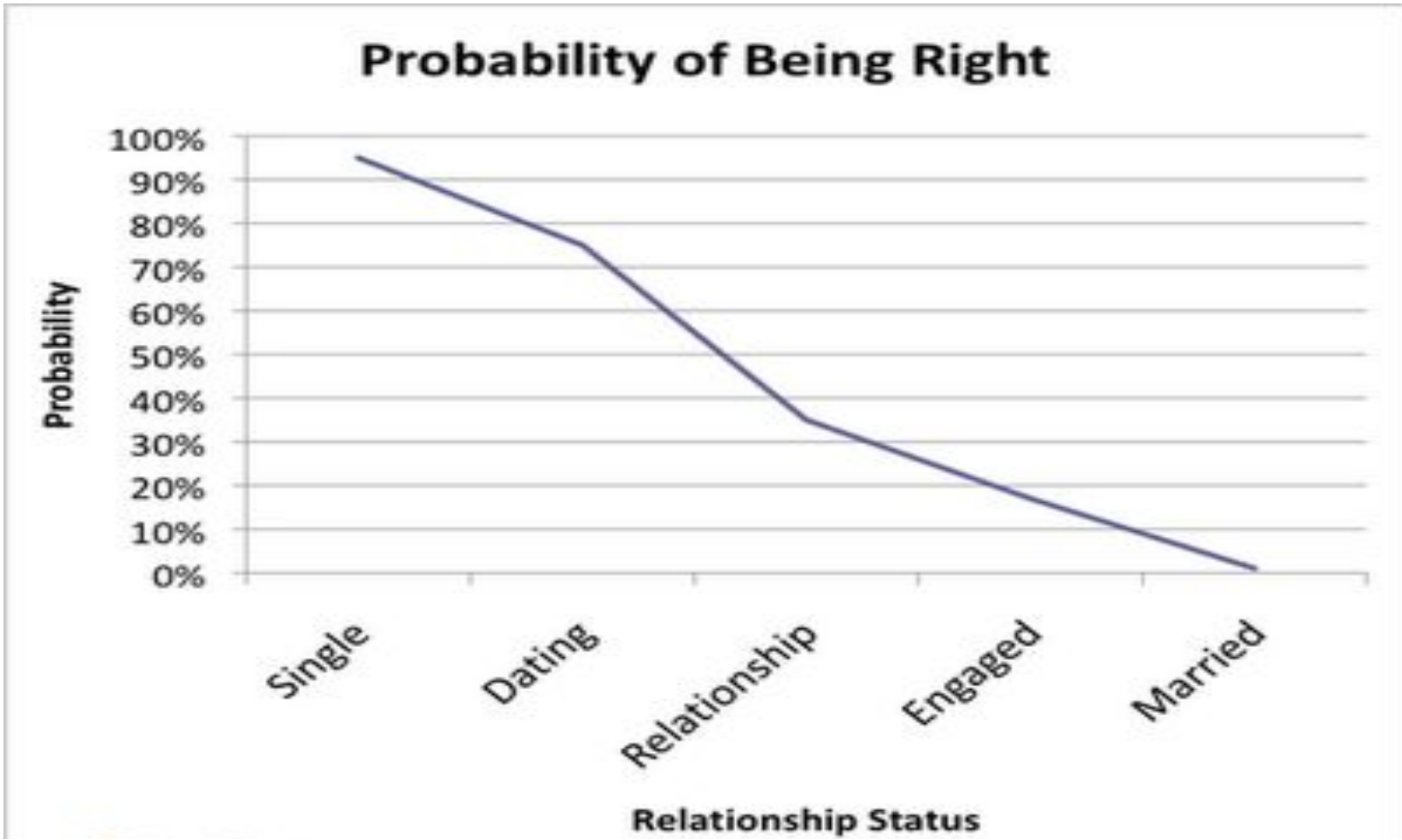
Probability of Being Right

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- *Learning targets: Same as last class.* **(Topic 1.3)**

- Expect a unit 1 test the week of September 19

Fun Set 1.3