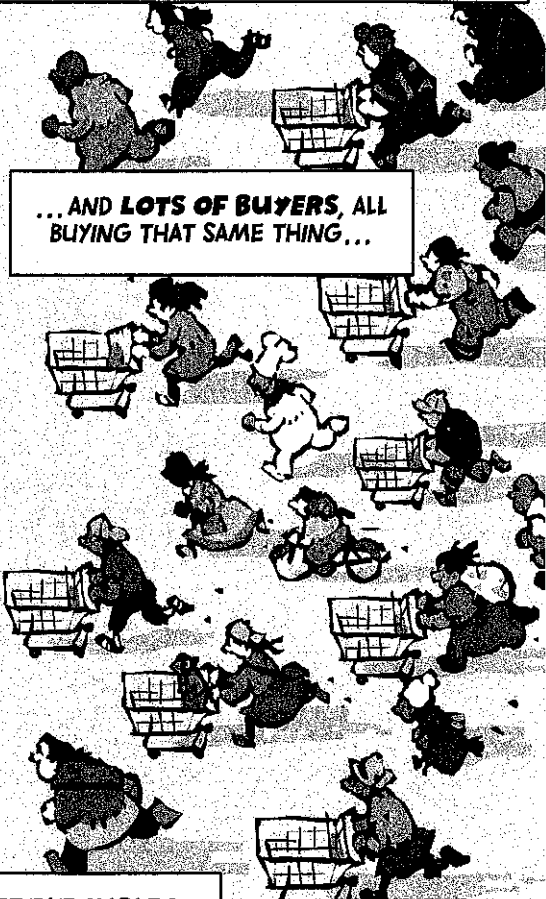


REMEMBER THAT COMPETITIVE MARKETS ARE ALL THE SAME!



LOTS OF SELLERS, ALL SELLING THE SAME THING...



... AND LOTS OF BUYERS, ALL BUYING THAT SAME THING...

... AND IN EVERY COMPETITIVE MARKET THERE'S A SINGLE MARKET PRICE!



IT'S THE LAW OF ONE PRICE, FROM PAGE 62.

ECONOMISTS SPENT MANY YEARS WONDERING **WHERE MARKET PRICES CAME FROM.**

AT FIRST THEY THOUGHT THAT PRICES WERE DETERMINED **By SUPPLY.**

THEN, IN THE 19TH CENTURY, SOME RENEGADE ECONOMISTS ARGUED THAT PRICES WERE DETERMINED **By DEMAND.**

IT'S ALL ABOUT THE SELLERS' COST OF PRODUCTION!

THAT'S BALDERDASH, YOU OLD COOT!

IT'S ALL ABOUT THE BUYERS' WILLINGNESS TO PAY!

FINALLY, IN 1890, **ALFRED MARSHALL** CLEARED THINGS UP BY TELLING THE FIRST-EVER ECONOMICS JOKE:

ARGUING ABOUT WHETHER IT'S SUPPLY OR DEMAND IS LIKE ARGUING...

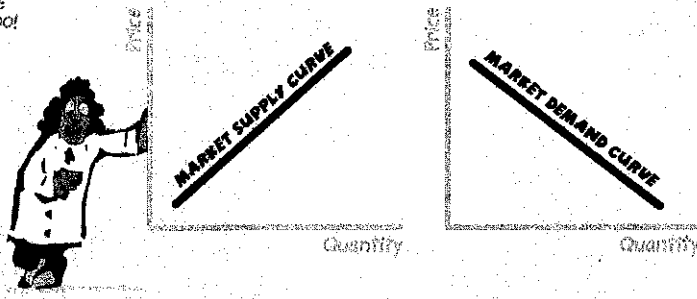
"... WHETHER IT IS THE UPPER OR THE UNDER BLADE OF A PAIR OF SCISSORS THAT CUTS A PIECE OF PAPER!"

SO NOW WE KNOW IT'S SUPPLY **AND** DEMAND.

THE THEORY OF SUPPLY AND DEMAND SAYS THAT PRICES IN COMPETITIVE MARKETS ARE DETERMINED BY TWO CURVES:

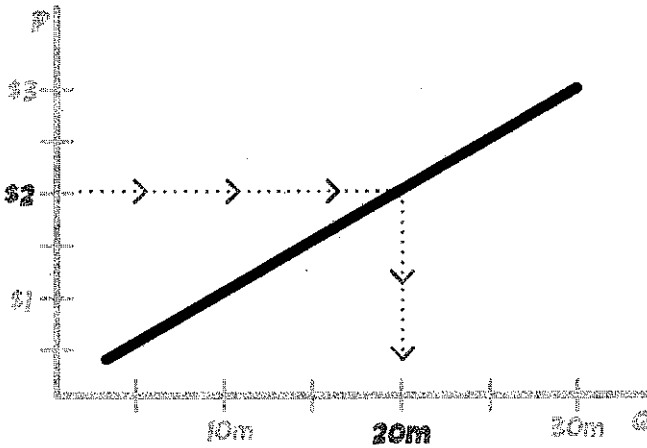
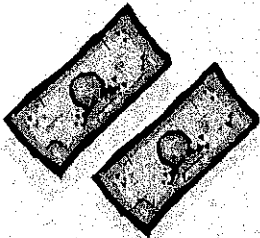
LET'S USE THE MARKET FOR RED DELICIOUS APPLES AS AN EXAMPLE...

LINES ARE CURVES TOO!



A MARKET SUPPLY CURVE DESCRIBES HOW MANY APPLES SELLERS WOULD WANT TO SELL IF THE MARKET PRICE WERE \$2, OR \$3, OR ANY OTHER PRICE.

FOR EXAMPLE, IF THE PRICE OF APPLES WERE \$2 PER APPLE...



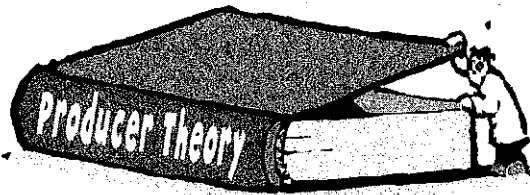
... SELLERS WOULD WANT TO SELL 20 MILLION APPLES PER DAY.

IF THE MARKET PRICE INCREASED, WE'D WANT TO SELL MORE!

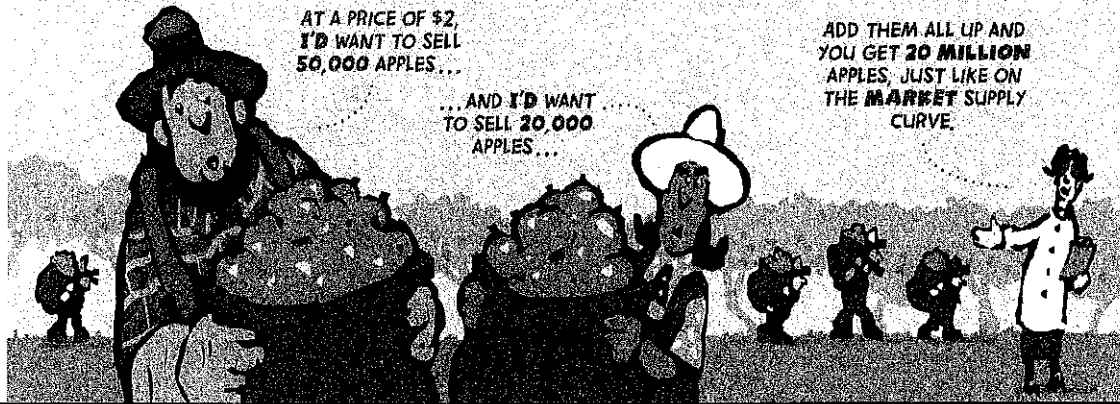
AND IF THE MARKET PRICE DECREASED, WE'D WANT TO SELL LESS.



WE COULD SPEND **WEEKS**
EXPLORING THE **DETAILS OF**
SUPPLY CURVES:



LIKE HOW **MARKET** SUPPLY CURVES COME FROM ADDING UP LOTS OF **INDIVIDUAL** SUPPLY CURVES...



AT A PRICE OF \$2,
I'D WANT TO SELL
50,000 APPLES...

... AND I'D WANT
TO SELL 20,000
APPLES...

ADD THEM ALL UP AND
YOU GET 20 MILLION
APPLES, JUST LIKE ON
THE **MARKET** SUPPLY
CURVE.

... AND HOW **INDIVIDUAL** SUPPLY CURVES COME FROM **INDIVIDUAL** OPTIMIZATION...

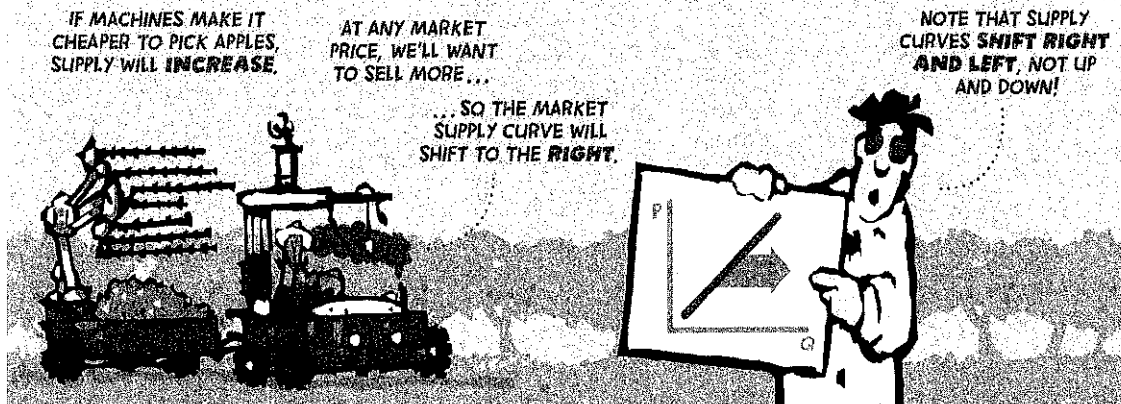


IF THE **MARKET** PRICE
WERE \$4, I'D MAKE SURE
TO PICK **EVERY** LAST
APPLE!

BUT IF THE **MARKET**
PRICE WERE \$0.50, I'D
JUST LET THE APPLES
ROT IN THE FIELD.

SHE'S MAXIMIZING HER
PROFIT, JUST LIKE THE
PIRATES ON PAGE 23.

... AND HOW **DIFFERENT** EVENTS SHIFT SUPPLY CURVES...



IF MACHINES MAKE IT
CHEAPER TO PICK APPLES,
SUPPLY WILL **INCREASE**.

AT ANY **MARKET**
PRICE, WE'LL WANT
TO SELL MORE...

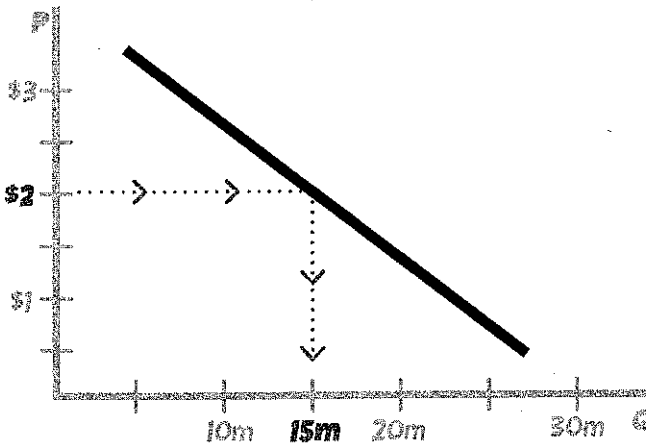
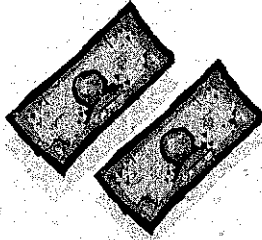
... SO THE **MARKET**
SUPPLY CURVE WILL
SHIFT TO THE **RIGHT**.

NOTE THAT SUPPLY
CURVES **SHIFT RIGHT**
AND **LEFT**, NOT UP
AND DOWN!

... BUT INSTEAD LET'S TURN OUR ATTENTION FROM **PRODUCER THEORY** TO **CONSUMER THEORY**.

A MARKET DEMAND CURVE DESCRIBES HOW MANY APPLES BUYERS WOULD WANT TO BUY IF THE MARKET PRICE WERE \$2, OR \$3, OR ANY OTHER PRICE,

FOR EXAMPLE, IF THE PRICE OF APPLES WERE \$2 PER APPLE...



... BUYERS WOULD WANT TO BUY 15 MILLION APPLES PER DAY.

IF THE MARKET PRICE DECREASED, WE'D WANT TO BUY MORE.

AND IF THE MARKET PRICE INCREASED, WE'D WANT TO BUY LESS.

THIS IS CALLED THE LAW OF DEMAND!



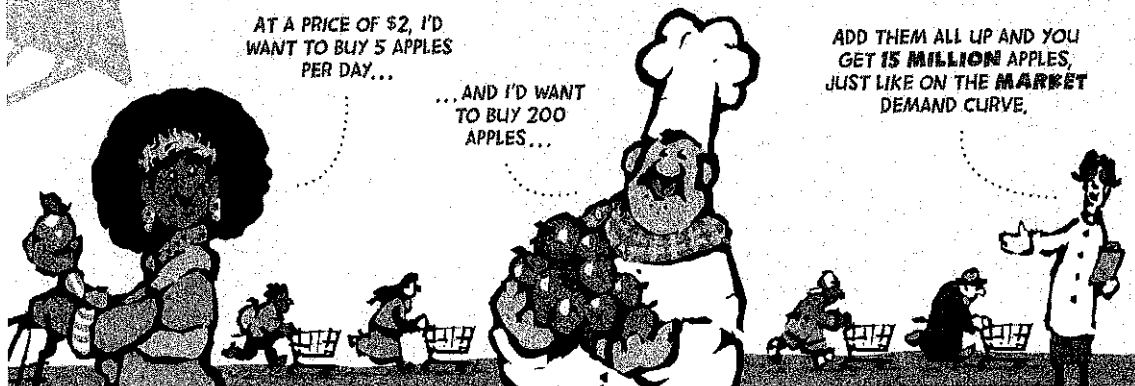
THERE ARE LOTS OF DETAILS ABOUT DEMAND CURVES:

LIKE HOW MARKET DEMAND CURVES COME FROM ADDING UP LOTS OF INDIVIDUAL DEMAND CURVES...

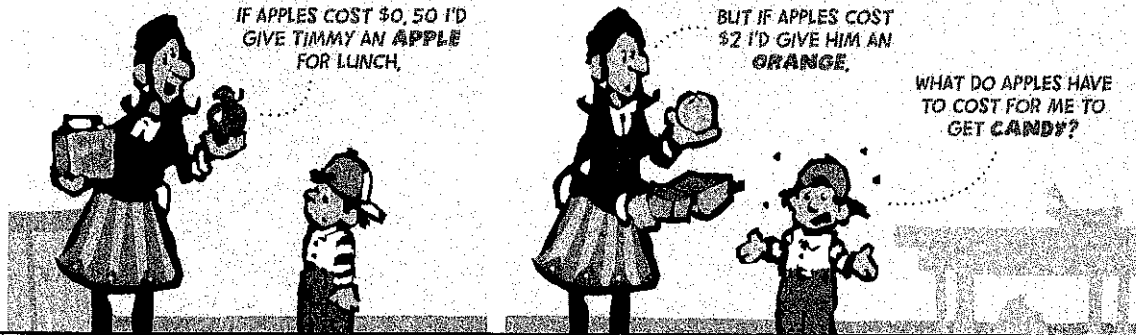
AT A PRICE OF \$2, I'D WANT TO BUY 5 APPLES PER DAY...

... AND I'D WANT TO BUY 200 APPLES...

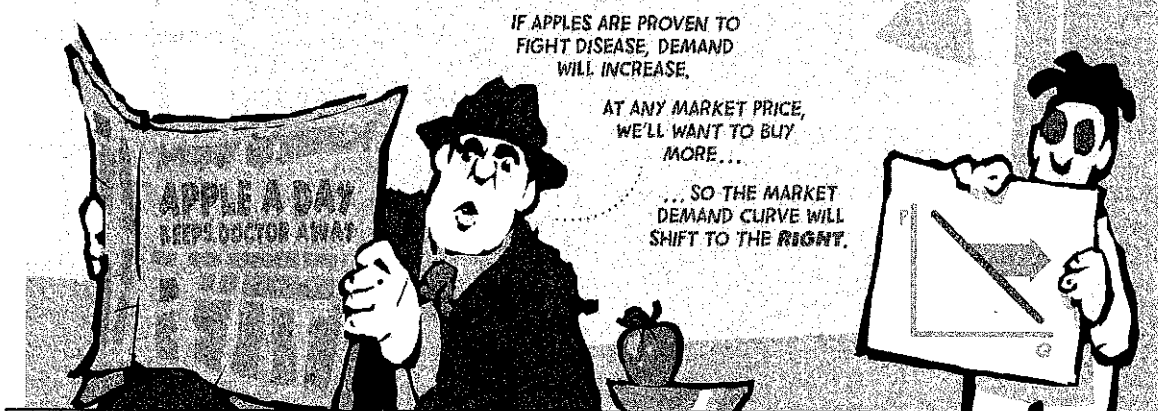
ADD THEM ALL UP AND YOU GET 15 MILLION APPLES, JUST LIKE ON THE MARKET DEMAND CURVE.



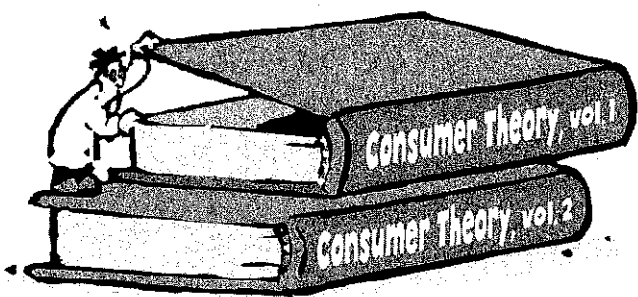
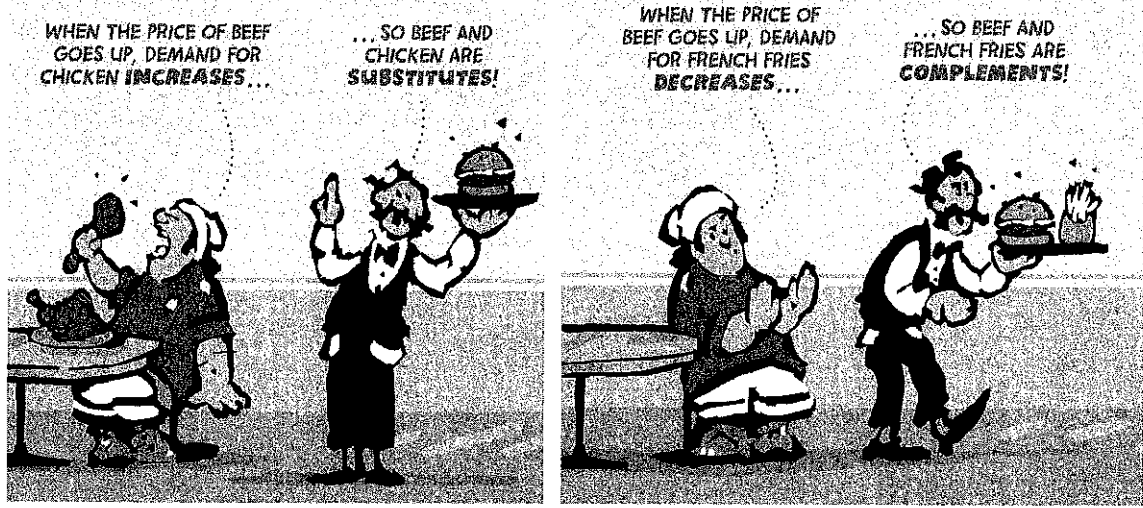
... AND HOW **INDIVIDUAL** DEMAND CURVES COME FROM **INDIVIDUAL OPTIMIZATION** ...



... AND HOW **DIFFERENT EVENTS** SHIFT DEMAND CURVES ...



... AND HOW DEMAND CURVES ARE USED TO DEFINE **OTHER ECONOMIC CONCEPTS**.

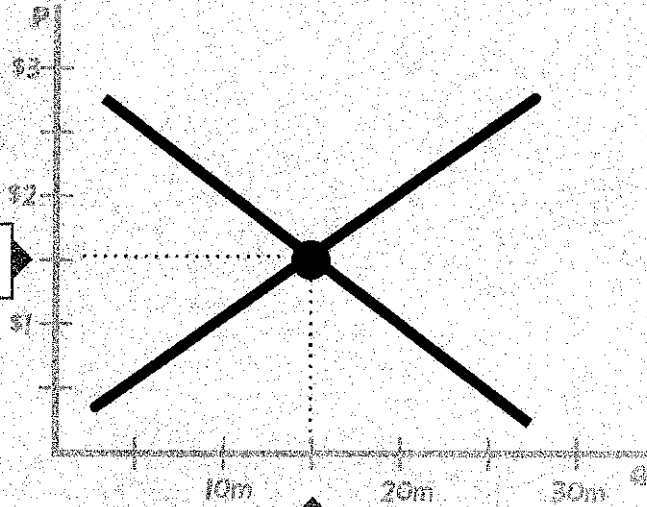


WE COULD SPEND **MONTHS** STUDYING THESE DETAILS, BUT **INSTEAD LET'S GET BACK TO SUPPLY AND DEMAND.**

BY COMBINING THE MARKET SUPPLY AND MARKET DEMAND CURVES, WE CAN PREDICT WHAT THE MARKET PRICE WILL BE.

IT'S PRECISELY AT THE INTERSECTION OF THE TWO CURVES!

THE MARKET PRICE WILL BE HERE: \$1.52 PER APPLE.

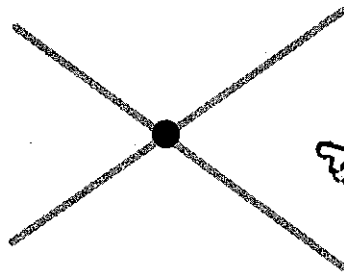


AND THE QUANTITY BOUGHT AND SOLD WILL BE HERE: 14.8 MILLION APPLES PER DAY.



AARGH!
X MARKS THE SPOT!

EXACTLY!
... AND WE CALL THAT SPOT
THE MARKET EQUILIBRIUM!



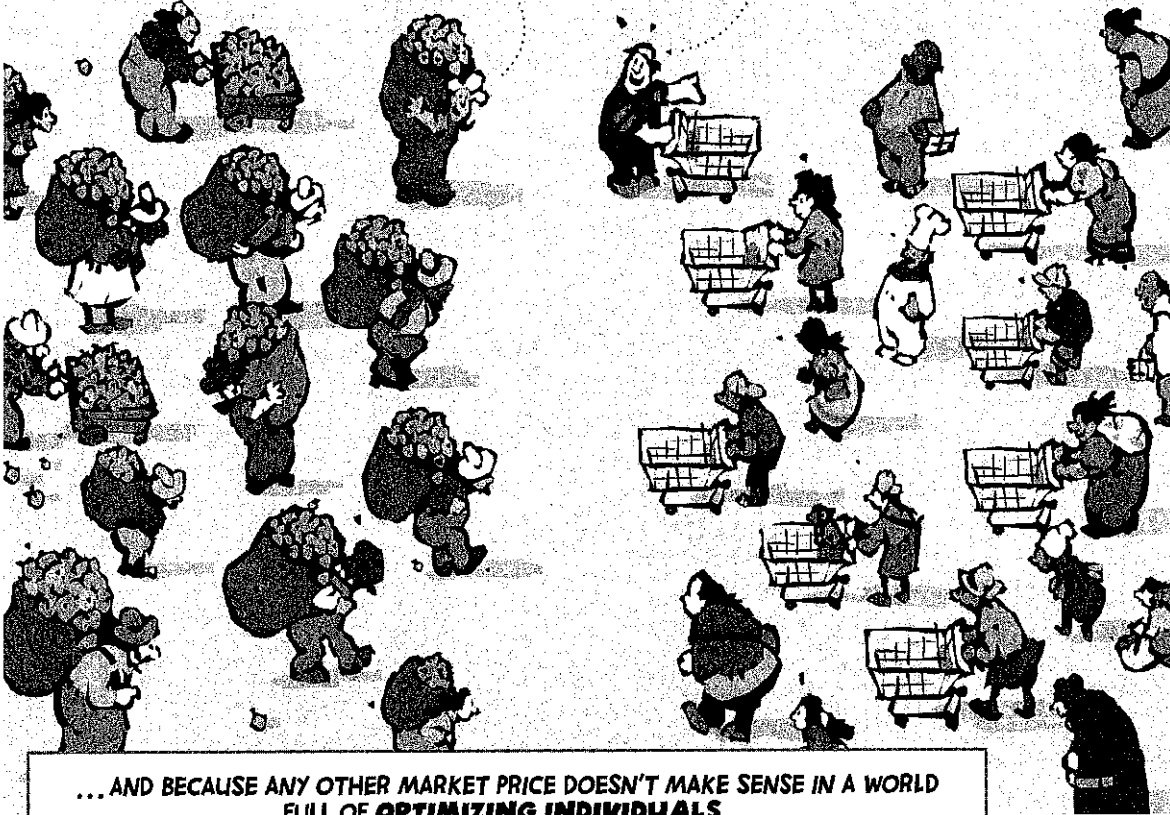
IT'S CALLED THE MARKET EQUILIBIUM PRICE BECAUSE AT THIS PRICE THE AMOUNT THAT SELLERS WANT TO SELL IS EQUAL TO THE AMOUNT THAT BUYERS WANT TO BUY...

IF THE PRICE IS
\$1.52 PER APPLE...

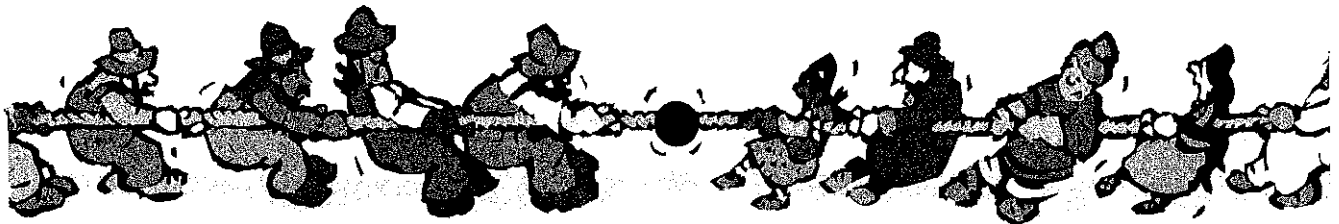
... WE'D LIKE TO SELL
14.8 MILLION APPLES!

THAT'S GREAT, BECAUSE
IF THE PRICE IS \$1.52
PER APPLE...

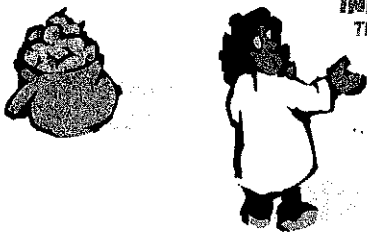
... THAT'S EXACTLY THE
NUMBER OF APPLES WE'D
LIKE TO BUY!



... AND BECAUSE ANY OTHER MARKET PRICE DOESN'T MAKE SENSE IN A WORLD FULL OF OPTIMIZING INDIVIDUALS,



ANY MARKET PRICE OTHER THAN
THE EQUILIBRIUM PRICE WILL CREATE
INDIVIDUAL INCENTIVES THAT PULL
THE PRICE TOWARD THE EQUILIBRIUM!



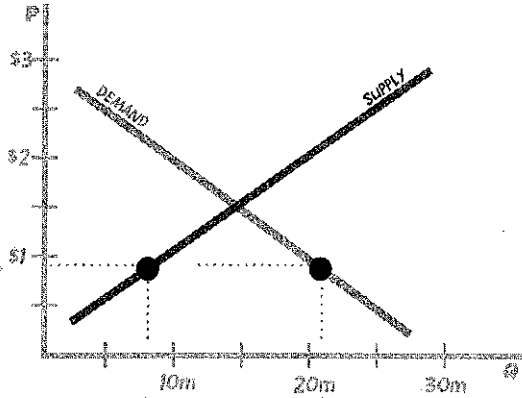
LET'S LOOK
AT THIS MORE
CLOSELY...



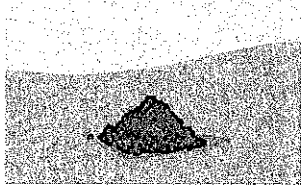
AT ANY MARKET PRICE BELOW THE EQUILIBRIUM, INDIVIDUAL INCENTIVES WILL DRIVE THE PRICE UP!



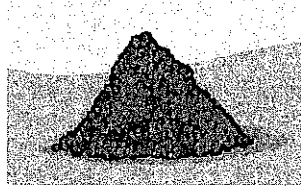
FOR EXAMPLE, IF THE MARKET PRICE WERE DOWN HERE...



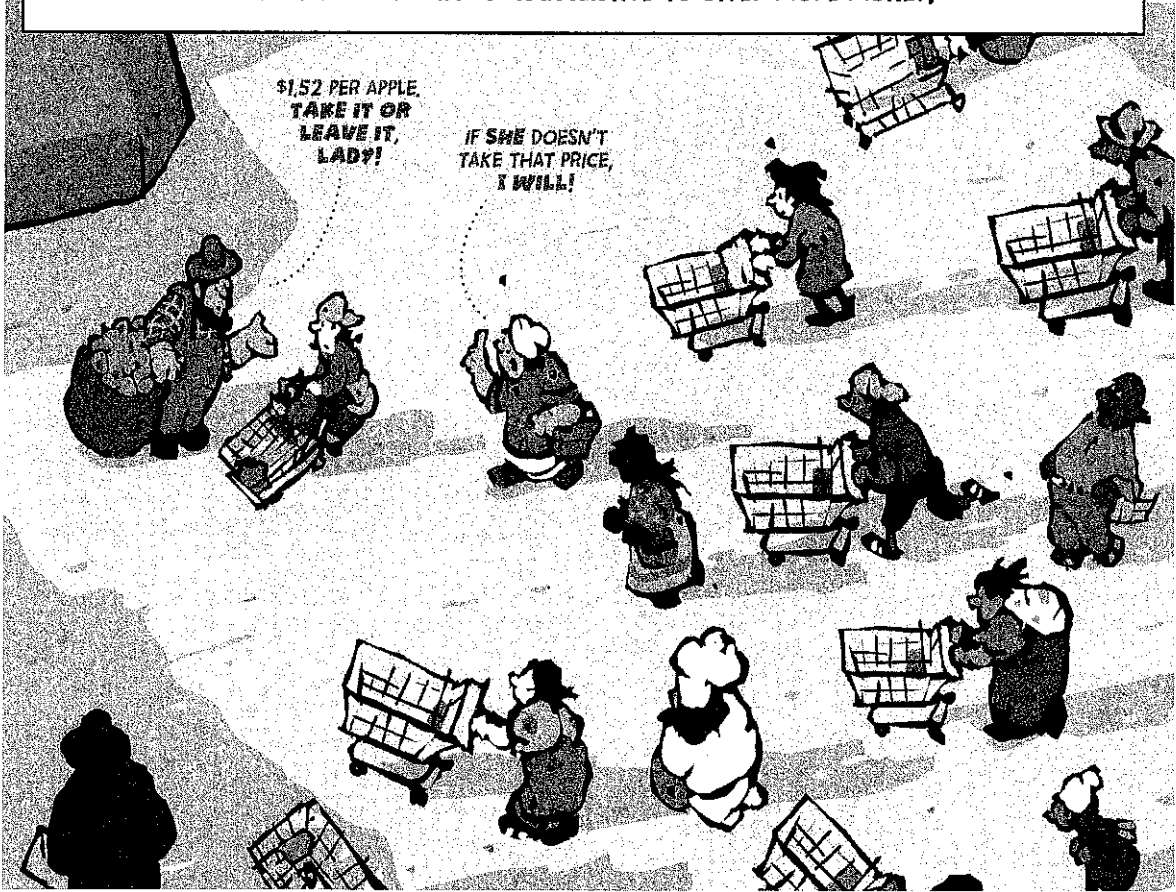
... THEN SELLERS WOULD WANT TO SELL THIS AMOUNT...



... AND BUYERS WOULD WANT TO BUY THIS AMOUNT.

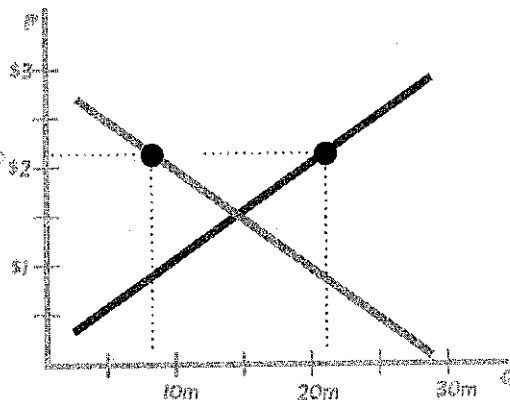


THIS IMBALANCE WOULD GIVE SELLERS AN INCENTIVE TO RAISE THEIR PRICES, AND GIVE SOME BUYERS AN INCENTIVE TO OFFER MORE MONEY.



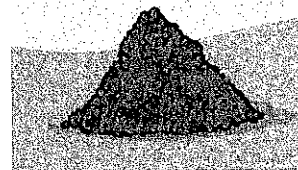
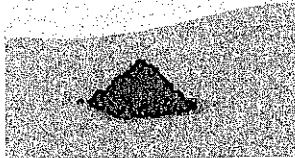
AT ANY MARKET PRICE ABOVE THE EQUILIBRIUM, INDIVIDUAL INCENTIVES WILL DRIVE THE PRICE DOWN!

FOR EXAMPLE, IF THE MARKET PRICE WERE UP HERE...

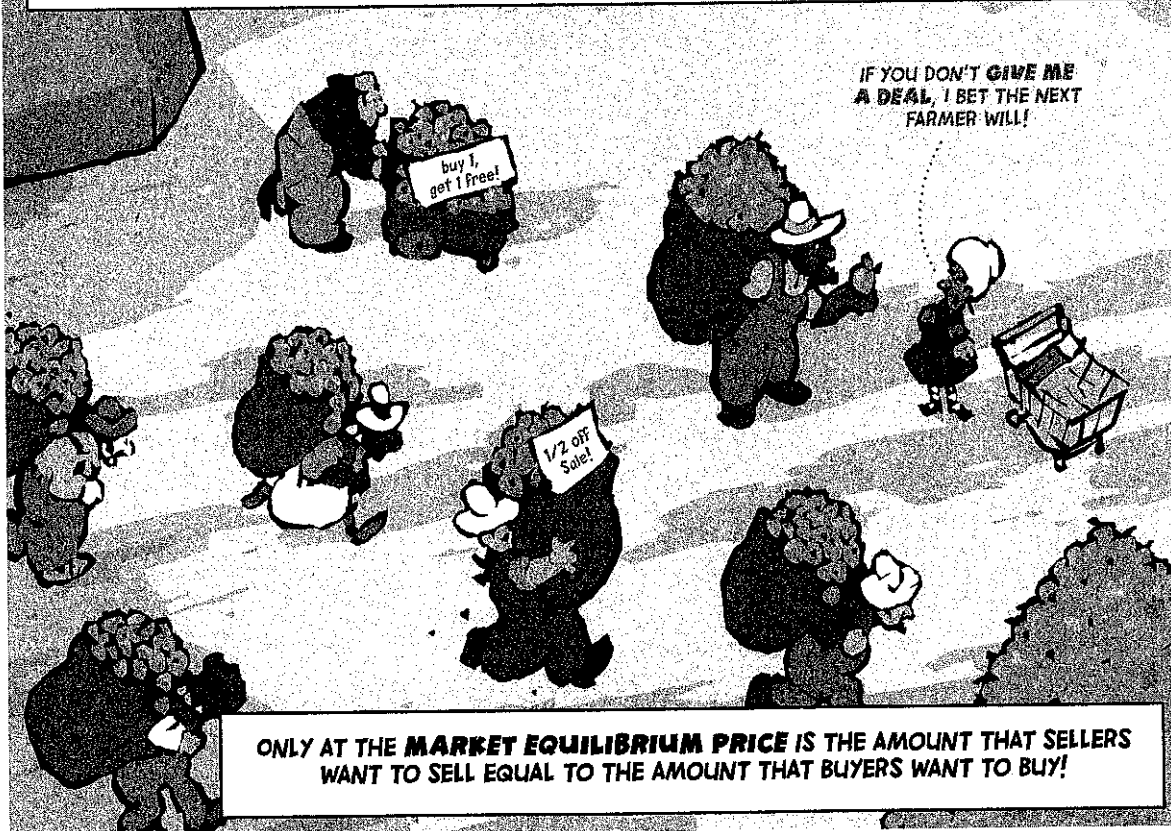


... THEN BUYERS WOULD WANT TO BUY THIS AMOUNT...

... AND SELLERS WOULD WANT TO SELL THIS AMOUNT.



THIS IMBALANCE WOULD GIVE SELLERS AN INCENTIVE TO LOWER THEIR PRICES, AND GIVE BUYERS AN INCENTIVE TO BARGAIN.



ONLY AT THE MARKET EQUILIBRIUM PRICE IS THE AMOUNT THAT SELLERS WANT TO SELL EQUAL TO THE AMOUNT THAT BUYERS WANT TO BUY!

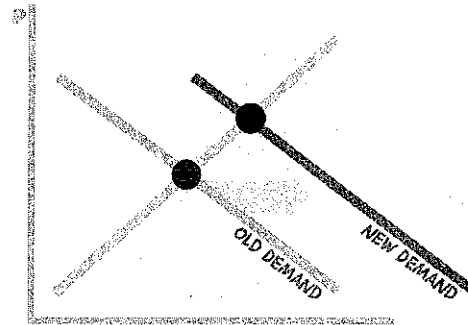
SINCE THE MARKET EQUILIBRIUM PRICE OCCURS AT THE INTERSECTION OF THE CURVES, ANY CHANGE IN THAT EQUILIBRIUM PRICE MUST COME FROM CHANGES IN THE CURVES!



THERE ARE FOUR BASIC SCENARIOS...

1. DEMAND CAN INCREASE.

THIS MIGHT HAPPEN IF LOTS OF BUYERS WANT TO TRY A NEW APPLE PIE RECIPE!



This pushes the demand curve to the right...

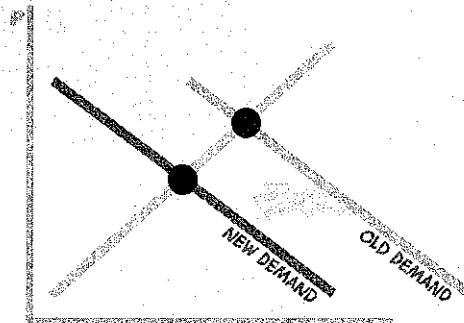
... and that pushes the equilibrium price and quantity up.



2. DEMAND CAN DECREASE.

APPLE PIE IS SO LAST YEAR...

... THIS IS THE YEAR OF THE PEAR TART!



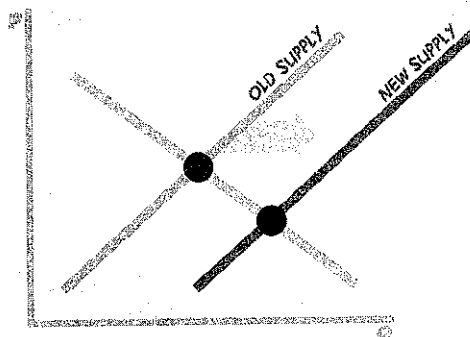
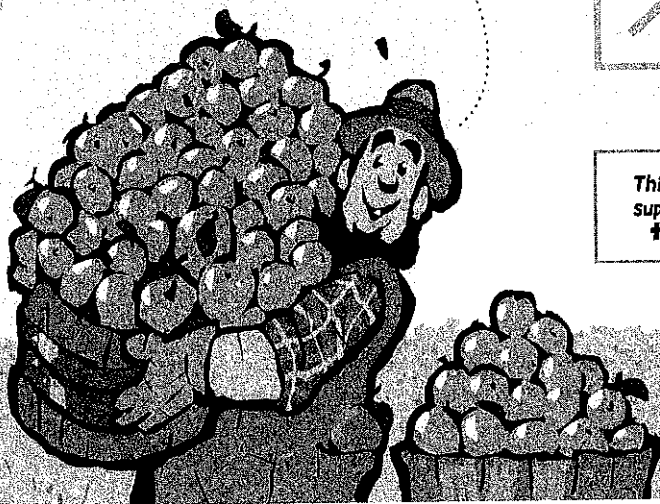
This pushes the demand curve to the left...

... and that pushes the equilibrium price and quantity down.



3. SUPPLY CAN INCREASE.

THIS MIGHT HAPPEN IF THERE'S A BUMPER CROP OF APPLES!



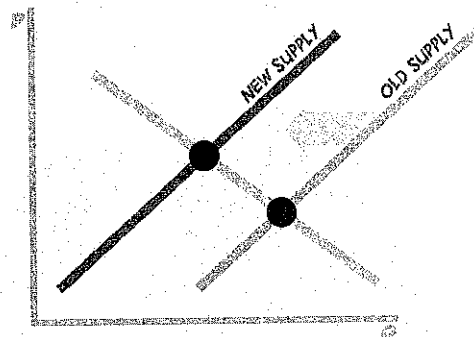
This pushes the supply curve to the right...

... and that pushes the equilibrium price **down** and the quantity **up**.



4. SUPPLY CAN DECREASE.

THIS MIGHT HAPPEN IF THERE'S A CROP FAILURE.



This pushes the supply curve to the left...

... and that pushes the equilibrium price **up** and the quantity **down**.



THESE ARE THE BASICS OF SUPPLY AND DEMAND!

AS WE MOVE ON,
REMEMBER THIS:



**SUPPLY AND DEMAND WORKS LIKE A
SEESAW, WITH THE MARKET
EQUILIBRIUM PRICE AS THE
BALANCE POINT.**

THE AMOUNT THAT
SELLERS WANT TO SELL
AT THE MARKET
EQUILIBRIUM
PRICE ...

... **ALWAYS
EQUALS...**

... THE AMOUNT THAT
BUYERS WANT TO BUY
AT THE MARKET
EQUILIBRIUM
PRICE!

