

ESTIMATING THE BREAK AND STROKING THE PUTT ON LINE					
DISTANCE OF PUTT IN FEET: YOUR NAME: _____, DATE _____					
		IF MORE THAN ONE ESTIMATE			
		1ST EST.	2ND EST.	3RD EST.	4TH EST.
1	VISUALIZE THE BALL'S <u>STARTING</u> LINE FOR THE FIRST INCH OR TWO. EXTEND THIS STRAIGHT LINE 17 INCHES PAST THE CUP. PUT A TEE OR GREEN REPAIR TOOL IN THAT SPOT. I DID THIS, Y OR N?	Y	Y	Y	Y
2	TO ACT AS A GATE, PLACE TWO TEES FOUR INCHES APART AND TWO FEET FROM THE BALL ON THE LINE THE BALL SHOULD ROLL. DID IT Y/N?	Y	Y	Y	Y
3	I HIT AT LEAST TEN PUTTS THAT WENT THROUGH THE GATE AND STOPPED IN A SPACE BETWEEN THE CUP AND THREE FEET PAST IT. Y/N?	N	Y	Y	Y
2	IF I CHANGED MY ESTIMATE OF THE BREAK, I MEASURED AND RECORDED THE BREAK IN INCHES IN THE BOXES TO THE RIGHT ON THIS ROW. Y OR N?	Y	Y	Y	Y
3	WAS THE AMOUNT OF ESTIMATED BREAK ON THE 2 ND THROUGH THE 5 TH ESTIMATES (IF ANY) <u>MORE</u> THAN OR LESS THAN THE <u>FIRST</u> ESTIMATE?		M	M	M
4	ON THE 2 ND TO THE 5 TH ESTIMATE, WAS THE BREAK TO THE CUP IN THE <u>SAME DIRECTION</u> , RIGHT OR LEFT, AS THE FIRST?		Y	Y	Y
IS A MISSED PUTT CAUSED BY AN ERROR IN THE ESTIMATE OF THE BREAK OR THE STROKE					
1	TWO FEET AHEAD OF THE BALL, PLACE TWO TEES FOUR INCHES APART TO SERVE AS "GATES" THROUGH WHICH THE BALL SHOULD ROLL. I DID THIS AND COUNTED ONLY THOSE PUTTS THAT ROLLED THROUGH THE TWO TEES. Y OR N?	Y	Y	Y	Y
PERFORMANCE ON EACH PUTT					
1	I AIMED ONLY AT THAT TEE MARKING THE ESTIMATED BREAK ON THIS PUTT, Y OR N?	N	Y	Y	Y
2	NUMBER OF PUTTS REACHING THE CUP THAT MISSED <u>ABOVE</u> THE CURVE TO THE CUP. ENTER A "1" AFTER EVERY PUTT.	1	3	4	7
3	NUMBER OF PUTTS MISSED <u>BELOW</u> THE CURVE TO THE CUP	9	6	5	3
4	PUTTS MISSED <u>ON LINE</u> (E.G., HIT THE CUP)	0	1	1	0
CONCLUSIONS ABOUT YOUR FIRST PREDICTION OF THE BREAK (FOR USE ON THE NEXT ESTIMATE)					
1	ON THE <u>LAST</u> ESTIMATE, WAS THE BREAK IN THE <u>SAME DIRECTION</u> AS THE <u>FIRST ESTIMATE</u> , Y OR N?		Y	Y	Y
2	RATIO OF <u>LAST-BREAK</u> DISTANCE TO <u>FIRST</u> - BREAK DISTANCE. EXAMPLE: LAST ESTIMATE WAS 10 INCHES. THE FIRST WAS 4 INCHES. 10/ 4 = 2.5 TIMES THE FIRST.		1.2	1.4	2.1
% PUTTS SUNK AT THIS DISTANCE					
1	TOTAL PUTTS TAKEN AT THIS DISTANCE	0	1	3	3
2	TOTAL PUTTS SUNK AND % OF TOTAL	0	10	30	30
3	TOTAL PUTTS MISSED	100	90	70	7-
4	TOTAL PUTTS MISSED THAT WENT TO OR BEYOND CUP	6	8	9	9

ESTIMATING THE AMOUNT OF BREAK ON YOUR PUTTS

Players of all experience levels, including the top stars, tend to hit most of their missed putts *below* the curve to the cup. Once it is rolling *below* the curve to the cup, gravity causes the ball to roll still further away from the cup. Thus, that putt cannot roll in the cup.

Since they see every putt, why do golfers not correct this problem? It is a feedback problem. They do not, or cannot, store data in their mind on a cumulative basis over many similar putts. Results occur in a jumbled order. One putt goes in the cup, the next misses on the low side, and the next misses on the high side. Then there are all the other shots to hit during a round. In addition, golfers do not record, accumulate and summarize data on paper as to whether they miss on the high side or the low side of each putt.

Thus, they are unaware of *their* error patterns, though many of have heard that *other* golfers suffer from this tendency of having their misses roll on a curve below the cup. They overestimate their performance, sometimes wildly, and are stunned when you present accurate data.

They putt on the low side because they do not estimate enough break. It also occurs because even if they see the correct amount of break, they tend to stroke more toward the cup than to a spot offering enough room to break. Thus, they need feedback on these two performances and get it in this experiment.

This feedback form presented here causes them to collect data on two key characteristics of putting performance. One, was their estimate of the direction and amount of curve in the putt accurate? Two, did they stroke the ball on the correct path they predicted?

Golfers who use this soon begin to estimate the break more accurately. When they do this, the percentage of putts they sink by distance tends to increase and it continues at higher levels long term, though they will vary from day to day, but less so. The golfer should use these procedures as part of each practice putting session forever.

In this drill, the golfer imagines a straight line the ball is to start on and continues it to a point 17 inches past the cup. To mark this aiming line, the golfer places a repair tool into the green. If the golfer chooses correctly the line and speed of the putt and then putts directly on it, gravity will cause the ball to roll into the cup, or close to it. The golfer places a coin four inches from the ball to mark the starting point for the repeating putts.

Does the golfer start the putt on the desired line? To find out, the golfer places two tees two feet from the ball and four inches apart in the green to act as gates. If the ball hits one of these tees or rolls on the outside edge of one of them, the golfer discards that putt from the study of the amount of break. In addition, the golfer discards any putt stopping short of the cup or more than three feet past the cup.

If the qualifying putts consistently roll either above or below the curve to the cup, the golfer readjusts the estimate of break and moves that marker. The golfer measures the distance and direction of the change and calculates the change in terms of percentages (e.g. 125% more break needed). When faced with estimating the amount of break on a similar putt in the future on the course, the golfer recalls the percentage adjustment and changes the amount of estimated break. This results in a higher percentage of putts sunk from that distance.