

National Technical Panel, ACA

Croquet refereeing,  
A video lawn-craft guide



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# Wiring lifts

## WIRING TESTS

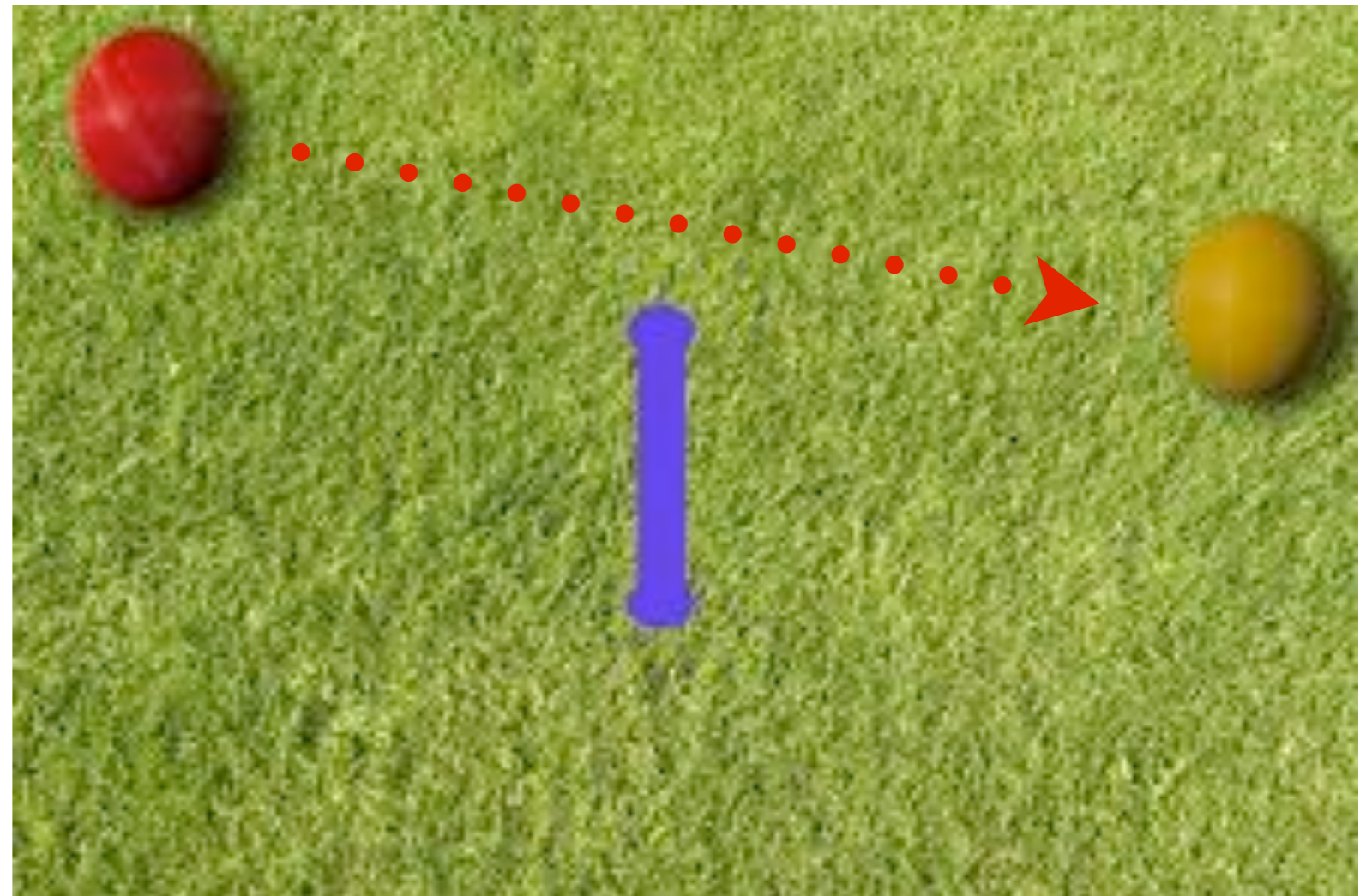
Greg Fletcher and James Temlett explain aspects on wiring of balls in various positions. Wired balls, mallet backswing, and at times the position of a ball against a hoop or peg.

<https://www.youtube.com/watch?v=xKREI8k545g>

Please refer to the accompanying diagrams which dovetail with the www clip

(Edited clip,t=7:25 , Adelaide 2013).

Asking ball (R) and Target ball (Y), across H<sub>I</sub> ?



## 1. Confirming entitlement

If you are called to adjudicate on a possible wiring lift, you must first confirm that the claimant has not yet played the first stroke of his turn and that the adversary is responsible for the position of the ball for which a lift is being claimed.

If the balls are not blatantly wired by a hoop upright or peg, you will need to do an ocular test possibly using separate test balls. It is recommended that you use a ball against the obstructing hoop leg or peg as illustrated. If one *must* use the target ball, with a pair of balls placed against the ball in question, remember to *carefully* mark the ball, so that it can be accurately replaced should it have been displaced in the wiring tests. However it is stressed that it is best NOT to contaminate the evidence.

## 2. Tests:

In the adjacent example you want to see if Red is wired on Yellow by the hoop (Fig.1.1). The aim of the test is place test balls (selecting a contrasting colour against the hoop to show the margin of the ball), impairing the target ball. This test ball (white) must be placed on the hoop leg, and at right angles to the line joining Red and Yellow (dotted line) (Fig. 1.2). Should you be required to place a test ball near the target ball, you first accurately mark (see Fig 2.1) the target ball (Y) without moving it. There is always the risk that it will be minutely moved during the test, should a ball be placed near the target ball, something we prefer to avoid when possible.

If uncertain, it would be preferable to call someone with good long distance eyesight, for a second opinion. Then closer inspection of the ball in question may be better determined along the accurately placed line connecting the balls. Conceivably one day a powerful laser, will make this task easier and more accurate.

Viewing over Red and White to assess if Yellow is in line (Fig 1.3) you need to get down low to view directly over the ball. At 20 meters you would require excellent eyesight, while laying flat on the ground. An alternate method is to use of a mirror viewed from above. If having aligned the outside edge of the test ball with the corresponding edge of the striker's ball, it may be more easily determined by viewing balls from the other end. A good idea would be to place a contrasting colour box, next to or behind, the distant ball to improve the ball edge - seeing the edge of a green ball at 20 meters against a green grass back-ground increases the chance of an incorrect wiring call.

Another ball cannot cause a wiring - only pegs and hoops are relevant. Also if one ball (R on Y) is wired on another, the converse (Y on R), does not necessarily apply.

Always make a definitive, informed decision and convey such with confidence. If you are unsure in your mind, the striker or claimant may be given the benefit of doubt. Law 13(e)(2).

### 3. Testing whether a Mallet can Strike a Ball Unimpeded

This is a difficult claim where the backswing may be *potentially* hampered. The striker should be asked to demonstrate his normal swing (with the mallet he has been using for this past turns), along the line of the most hampered shot, but parallel to the line in question; and you should observe both the back of the backswing (from a point level with the hoop and at right angles to the line, with the eyes at the same height as the crown of the hoop) and the straightness of the swing in relation to the line of aim. This test depends on the dimensions of the player's mallet head. White (Fig.1.5) should be able to be driven in the indicated direction, with ANY part of the mallet face, toward pink. Hence it is wired because if the striker chooses to use any part of his mallet face, then the mallet swing will be impeded by the peg (or a hoop) before the mallet makes contact with the centre of the ball. The player is under no obligation to play the stroke using his mallet as shown, just should he want to, the hoop would prevent him from hitting the ball.

Note the player may not change mallets during this turn, or he could then claim a lift using a wider or longer mallet! Should the White ball (Fig 1.5) need to be driven in a direction perpendicular to the purple tangent line then the hoop is not causing the ball to be wired. The ball can be hit using all parts of the mallet face. The fact that the mallet smashes into the hoop after the moment of impact is inconsequential to the ruling. A referee should remain in charge if the stroke is played from such a position, to ensure that a beveled edge is not used.

### 4. Judging a Hampered Back Swing

The player should have a clear back swing and if any object (other than another ball) would impede his back swing then he may be eligible for a lift (Fig 1.7). If a player has a crooked back swing then there are occasions when they would get a lift and a straight back swing player would not. It can be interpreted that the player should be able to use his *normal* swing.

The Laws make no account for the furniture (equipment) on the court affecting the *stance of a player*. Hence if a hoop gets in the way of their preferred stance preventing them from playing a stroke in their chosen manner they have no recourse to the Laws.

### 5. Judging Clean Contact:

The ball must be able to strike either side of the target ball. Here the hoop leg may obstruct this if the angle is  $> 90$  degrees toward the line joining the balls and the line through the centers of the target ball and hoop leg. (Fig.1.7 and 1.10)

### 6. Technical Wiring **Law 13 (c)(3)**

Do not forget that if any part of the striker's ball is in the jaws of a hoop, the claim is valid (unless it is also in contact with another ball - 13(a) even if in reality, the striker could roquet any part of the object ball with any fair shot (Fig 1.7 -11). The jaws include the whole area enclosed by the uprights: the ball does not need to show through on the 'other' side.

## 7. Marking the Position of a Ball

It is best to use at least three markers per ball as shown in (Fig 1.6). There are at least 6 actual choices, the three away from the line of strikers swing selected in the example below.

Figures 1.8 to 1.13 show further wiring examples.

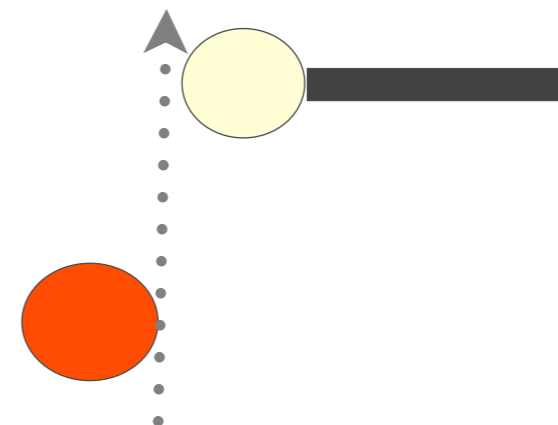
### Fig 1.1

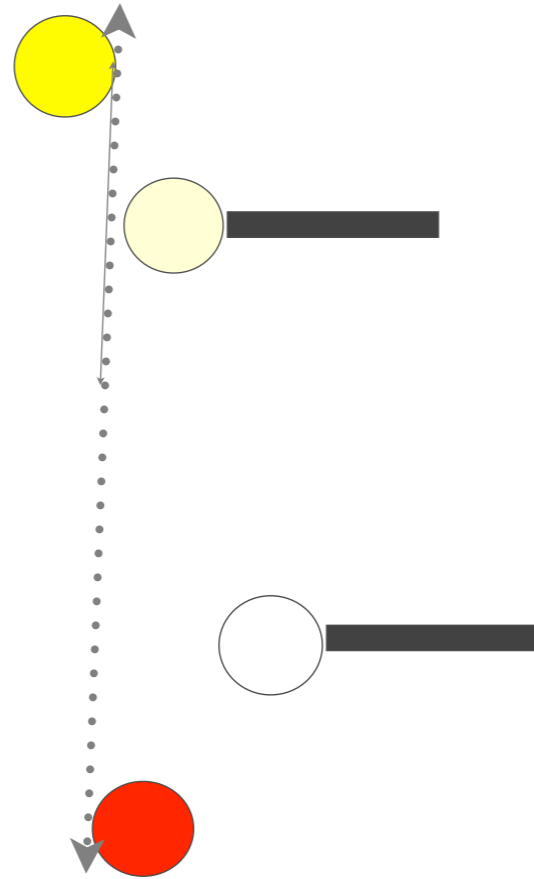
In the example below you want to see if Red at H2 is wired on Yellow (behind H1) by either H2 or H1 hoops



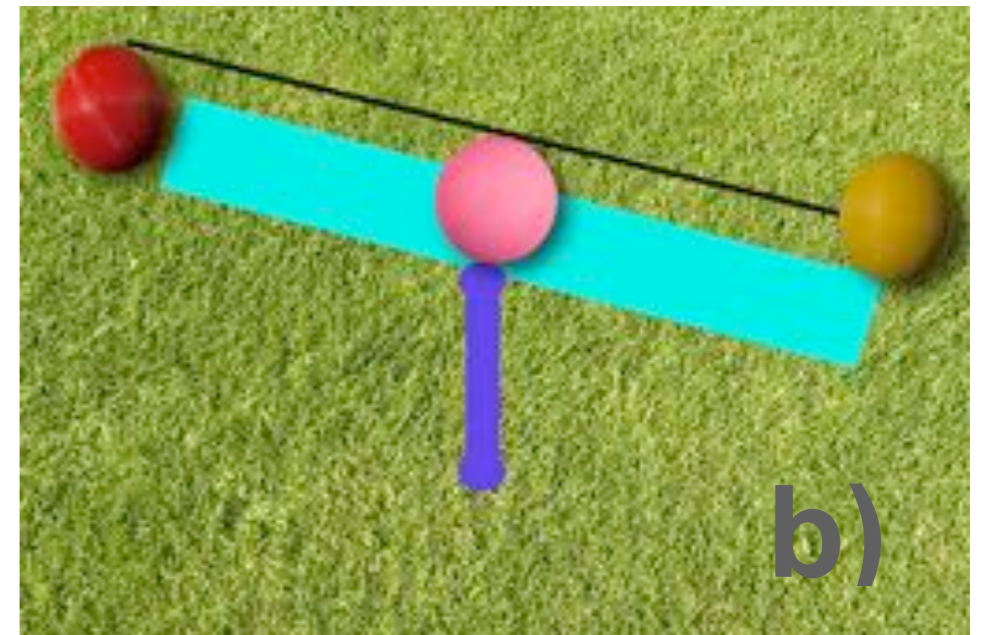
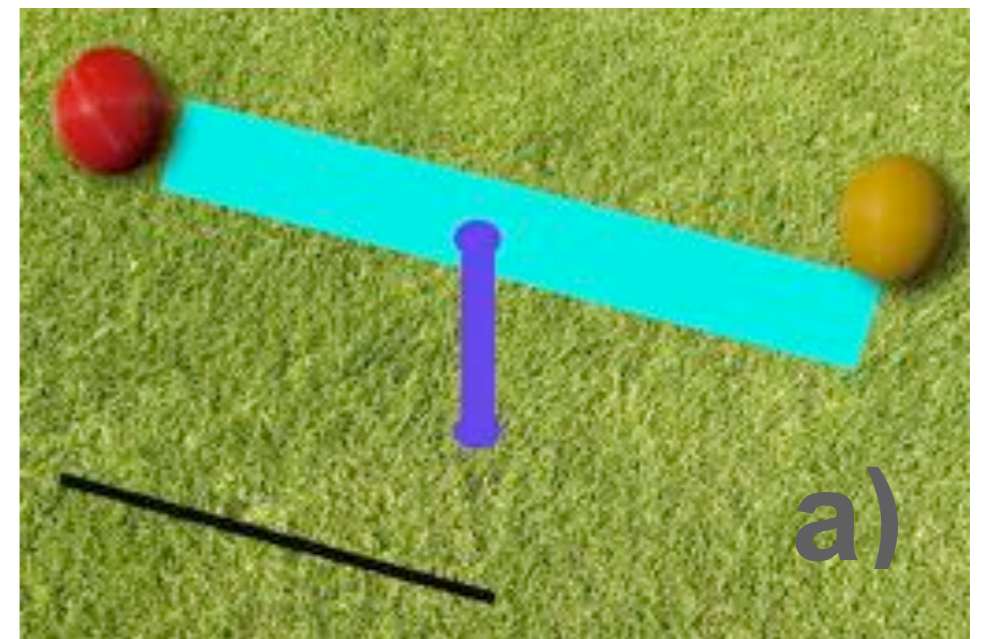
This series of pictures is taken from the wiring DVD chapter that accompanies this manual.

**Fig 1.2** This test ball (white here) must be placed on the hoop leg, and at right angles to the line joining Red and Yellow.

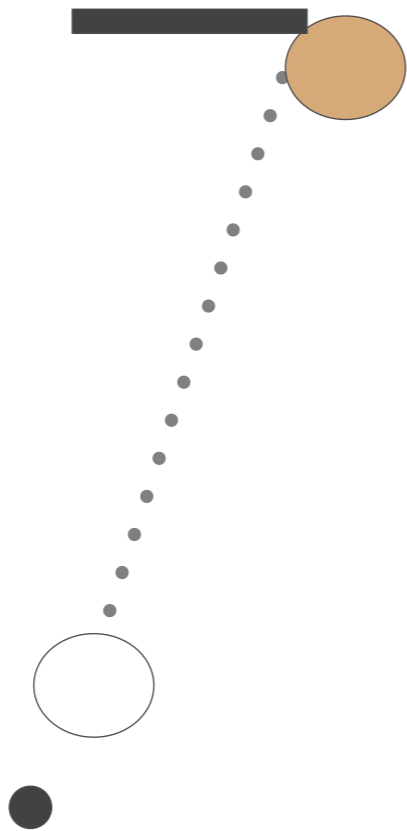




**Fig 1.3** Viewing over Red and Pink to assess Y Ball You also need to get down low over the balls, and at 20 m require excellent eyesight laying flat on the ground, or alternatively use of a mirror viewed from above.



**Fig 1.4** Diagram depicting the same principle of Fig 1.3, here the balls are closer to the potentially obstructing hoop, and a turquoise zone is marked to outline the path the R claimants ball would have to tracked along without a test ball in a) and with a pink test ball in b) WIRED in both cases, since R cannot strike the RIGHT edge of Y.

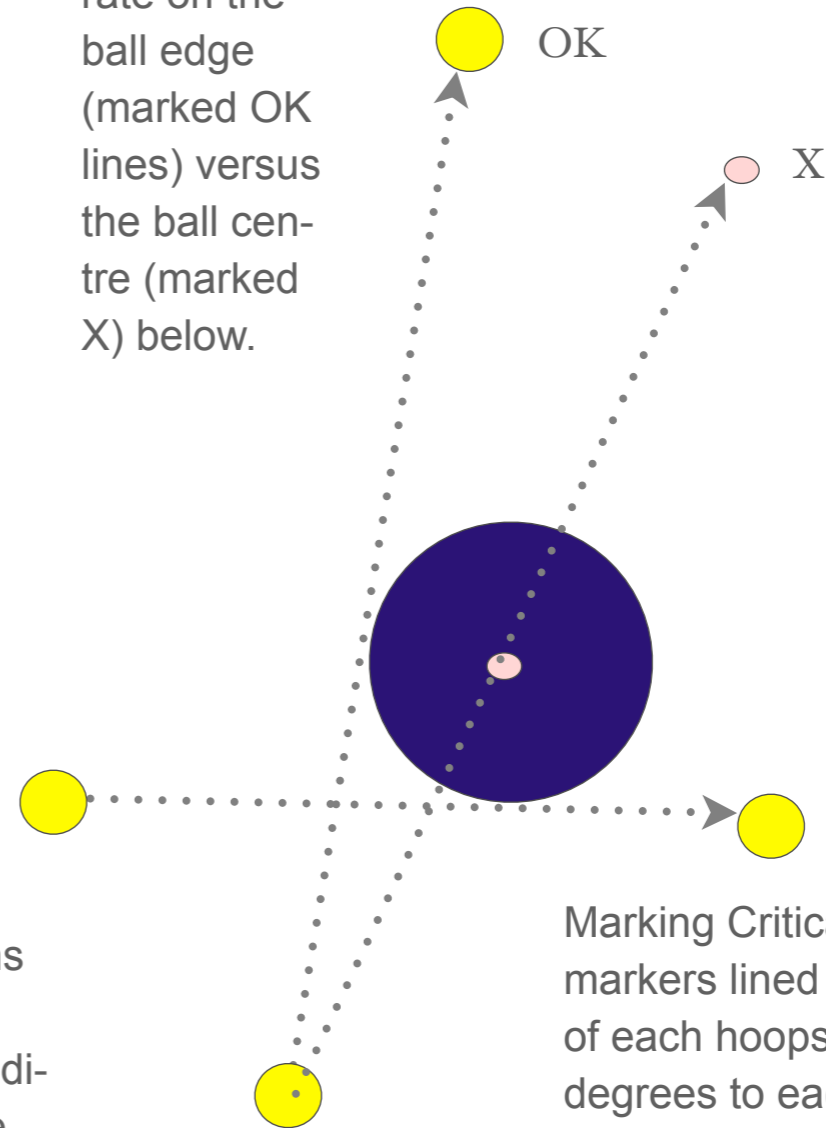


**Fig 1.5**

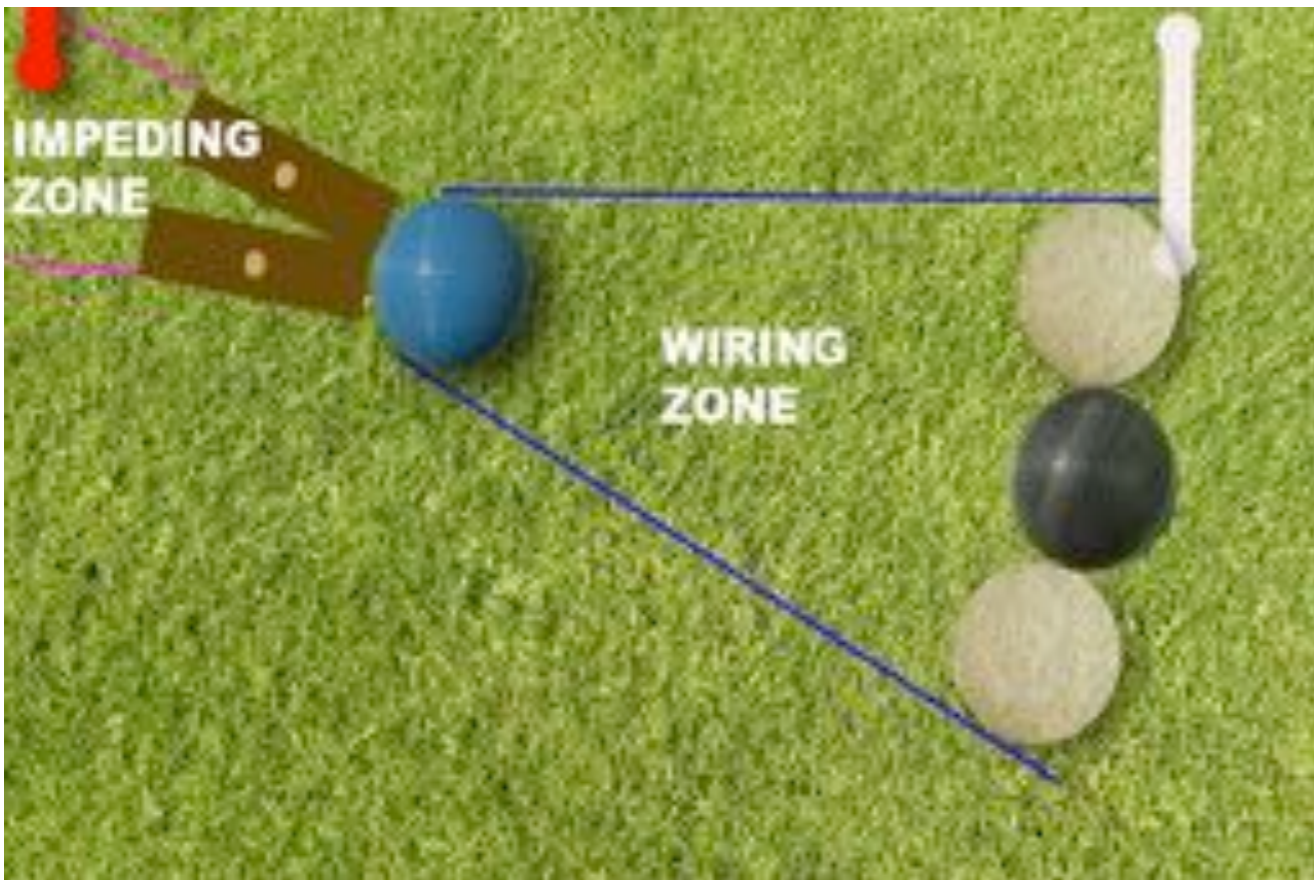
This test depends on the dimensions of the player's mallet head. White should be able to be struck in the indicated direction, with ANY part of the mallet face, toward pink.



**Fig 1.6**  
Marking balls are always more accurate on the ball edge (marked OK lines) versus the ball centre (marked X) below.



Marking Critical Balls, R two markers lined up on centre leg of each hoops side, best at 90 degrees to each other, or three markers two across the balls edge. Finding the ball centre (X) is less precise than utilising the edge.



**Fig 1.7**

In this diagram the B ball is wired for TWO reasons. First the back swing of the mallet using the upper mallet position would strike the red hoop leg.

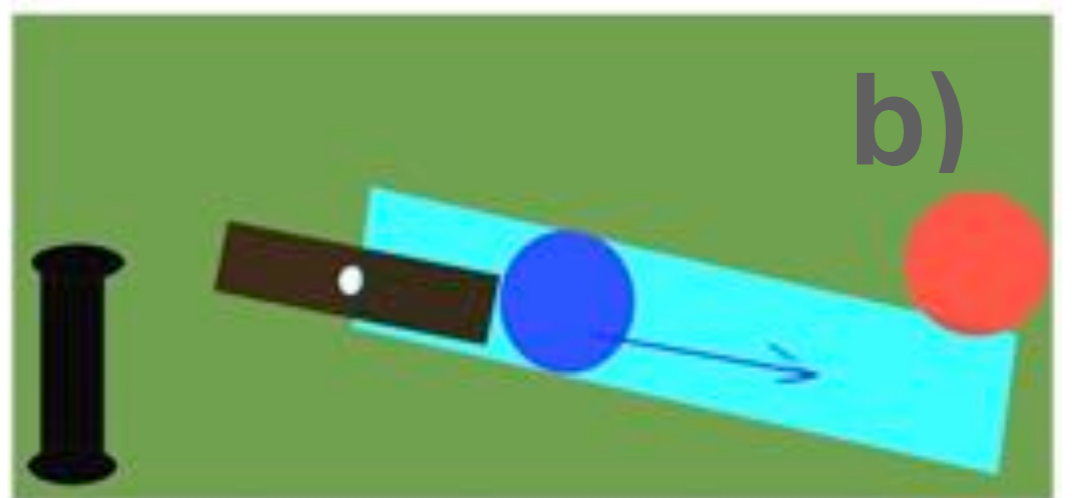
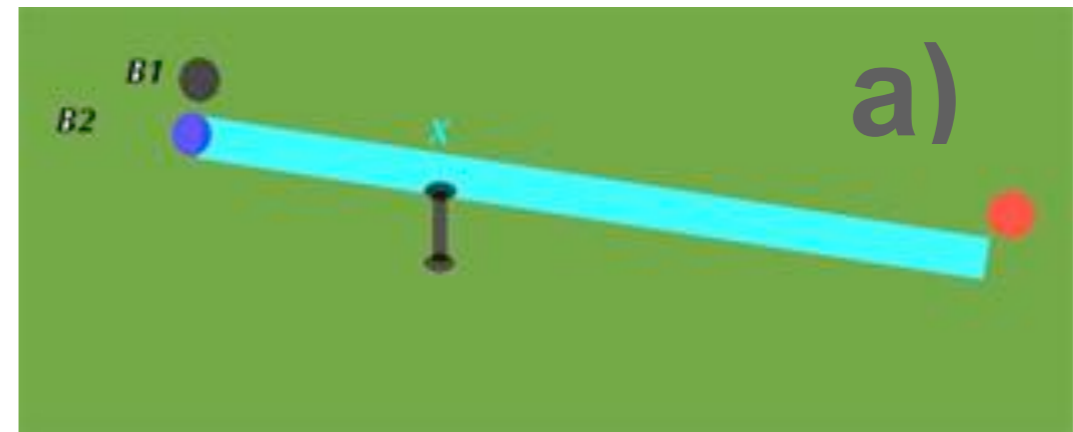
Secondly, if two test balls were visualised (preferable NOT to use test balls that would contaminate the evidence, by moving even a well marked K ball), but shows the top white test overlay prevents the blue ball from hitting the left edge of K.

Decision: Wired, entitled to a lift.

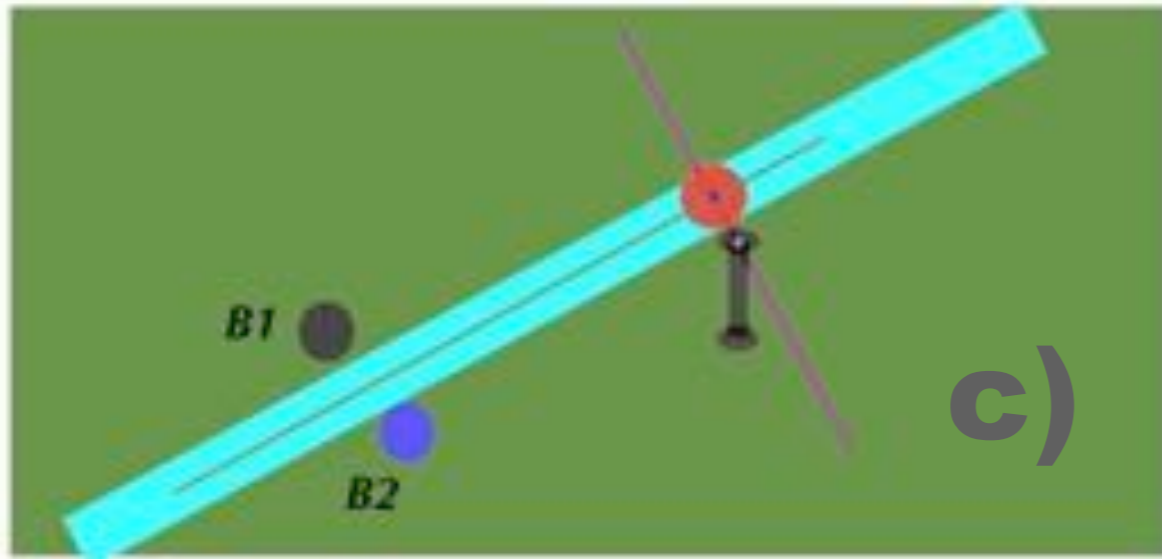
**Fig 1.8**

a) Asking ball Blue (ball 2) is wired, but Black (ball 1) below is not wired, when judging from R the target ball.

b) The mallet cannot strike the B asking ball, to hit the right edge of the R target ball, since the hoop impedes the strikers usual mallet backswing.







**Fig 1.8. c)**

Is R wired from B1 (K ball)? Decision: No

Is R wired from asking ball B2 (B ball)?

Decision: Wired, the angle between centre of the turquoise line intersecting the visualised purple line shown above angle is  $< 90$ )

Claimant is wired below, hence now entitled to lift R to either baulk line.

Note the critical line is the perpendicular black line drawn down from the purple line connecting the front edge of the hoop to mid-B ball center marked by a dot.

The area right, facing the hoop, of this line (ie.  $< 90$  degrees) wiring zone, because the asking balls *left* will strike the hoop leg before the *right* side of the target ball.

(See Fig 1.7 and 1.9 for view of the visualised ball path and angles considered)

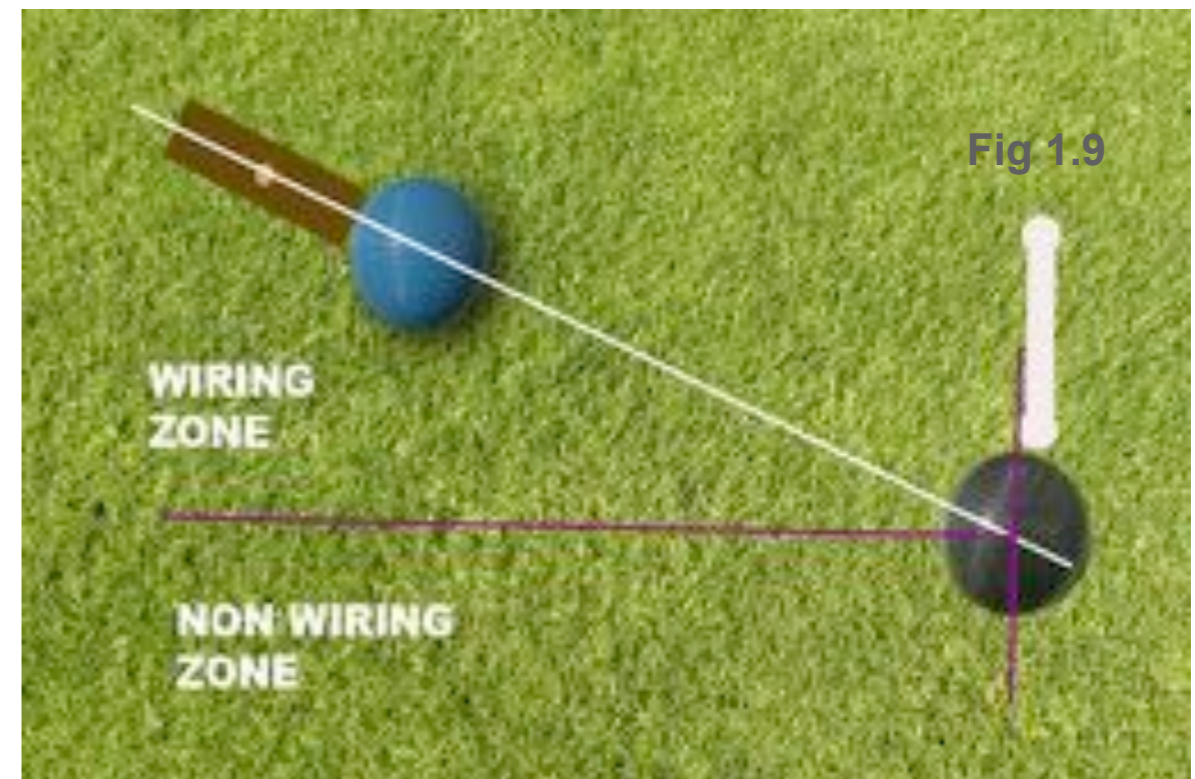
**Fig 1.9 WIRING:**

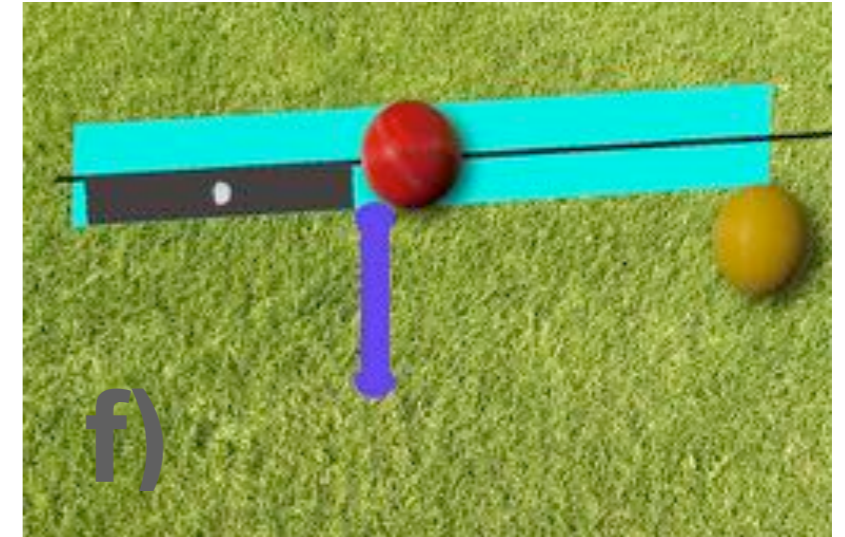
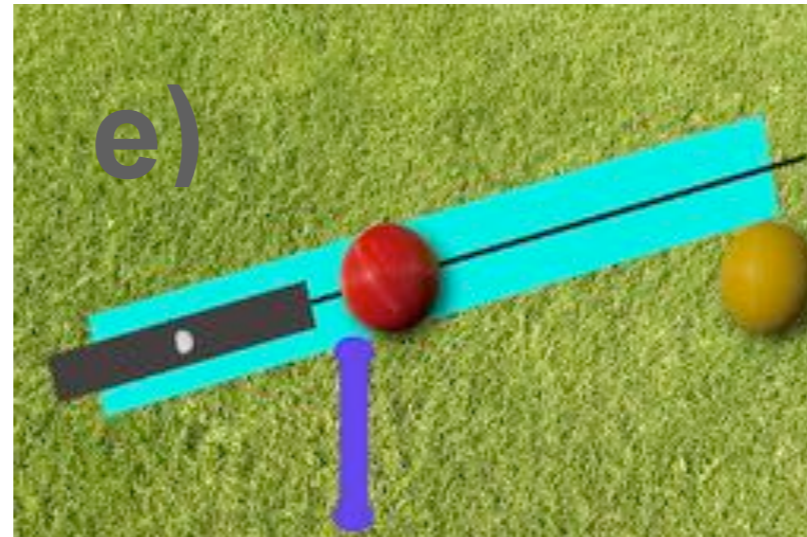
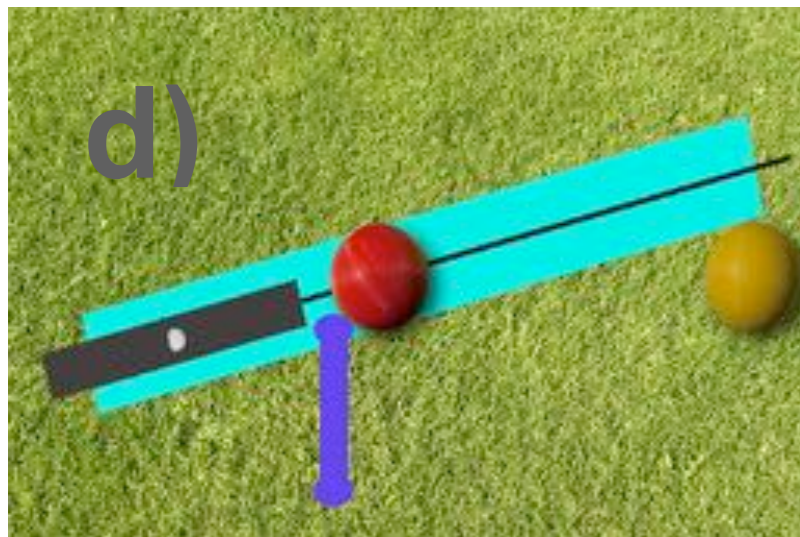
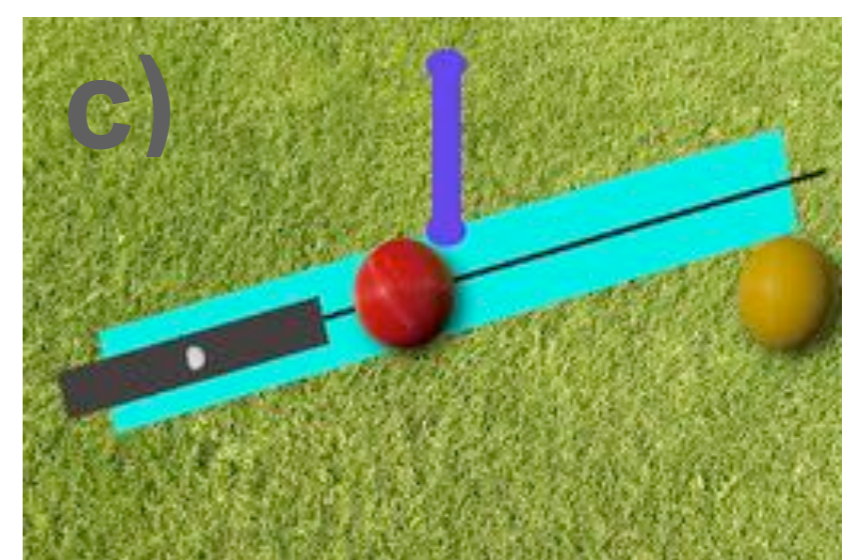
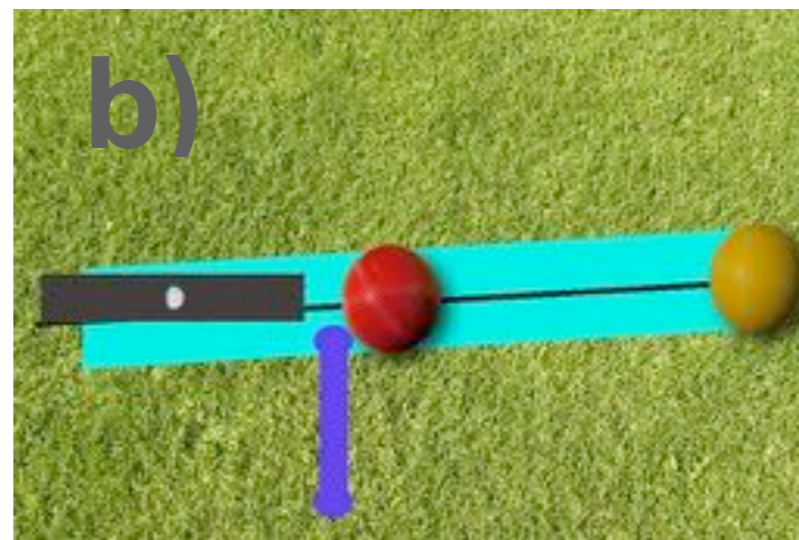
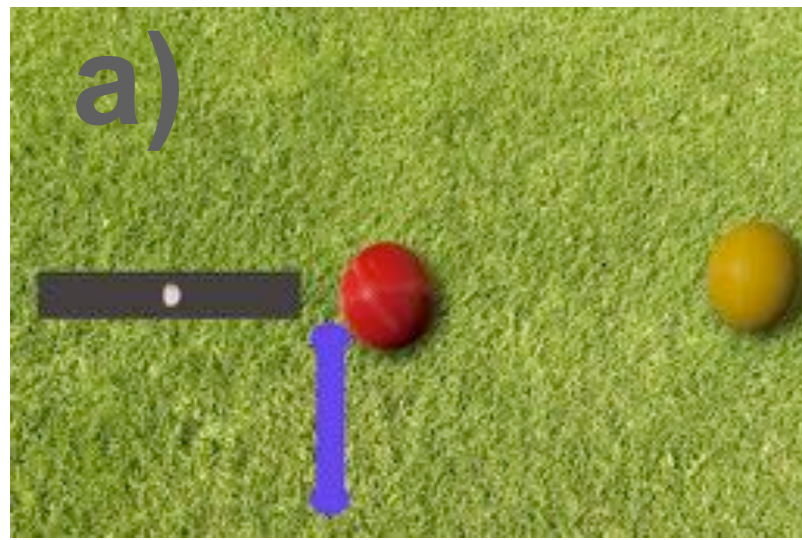
Another example asking ball B, target ball to be struck K, the white line showing the mallet, and ball directions.

To illustrate the angles considered for wiring on the hoop leg adjacent to K, the purple line running from ball centre to front leg of hoop is projected 90 degrees from this line. Mallets are discouraged, and the use of a T square which may disturb the balls in question.

If  $< 90$  degrees [from a line drawn through the middle of the hoop leg and the centre of the black ball and a second line intersecting this plane then wired (see wiring zone in Fig 1.9), This example is about 30 degrees, in wiring zone indicated above the purple line.

Were the B ball on or below it no wiring entitlement would be decided, since both sides may be hit unobstructed, by the LEFT





**Figure 1.10**

a) Is R Wired from Y? Referees decision and why?

b) Lines and ball path showing why R is actually wired, remember the striker may choose to play lower half of the Red ball (However this is NOT what you should be judging rather the path to Y shown in d) to f).

*Correct Answers*

c) R is also Wired from Y target top right of the page, the hoop blocking the red ball path to Y

d) R Wired. If played the mallet would strike the hoop before being able to play at Y balls left edge

e) R Wired also cannot strike the right half of the R ball to left side of the Y ball, (benefit to striker?) *BUT see f)*

f) R **NOT Wired**. Since claimant would be trying to play half the R ball, which will cause a bevel edge (hitting R closer to hoop and below the ball centre, would comprise a bevel fault, The mallet could easily be angled to strike the R ball to either side of Y ball.

(Note in all Fig 1.10 pictures, the black line is through the centre of the R ball above, turquoise panel marks the path to one side of the Y ball)

### Figure 1.11

This photograph is taken from a game during the 2014 Mac Robertson Croquet Shield Test Match

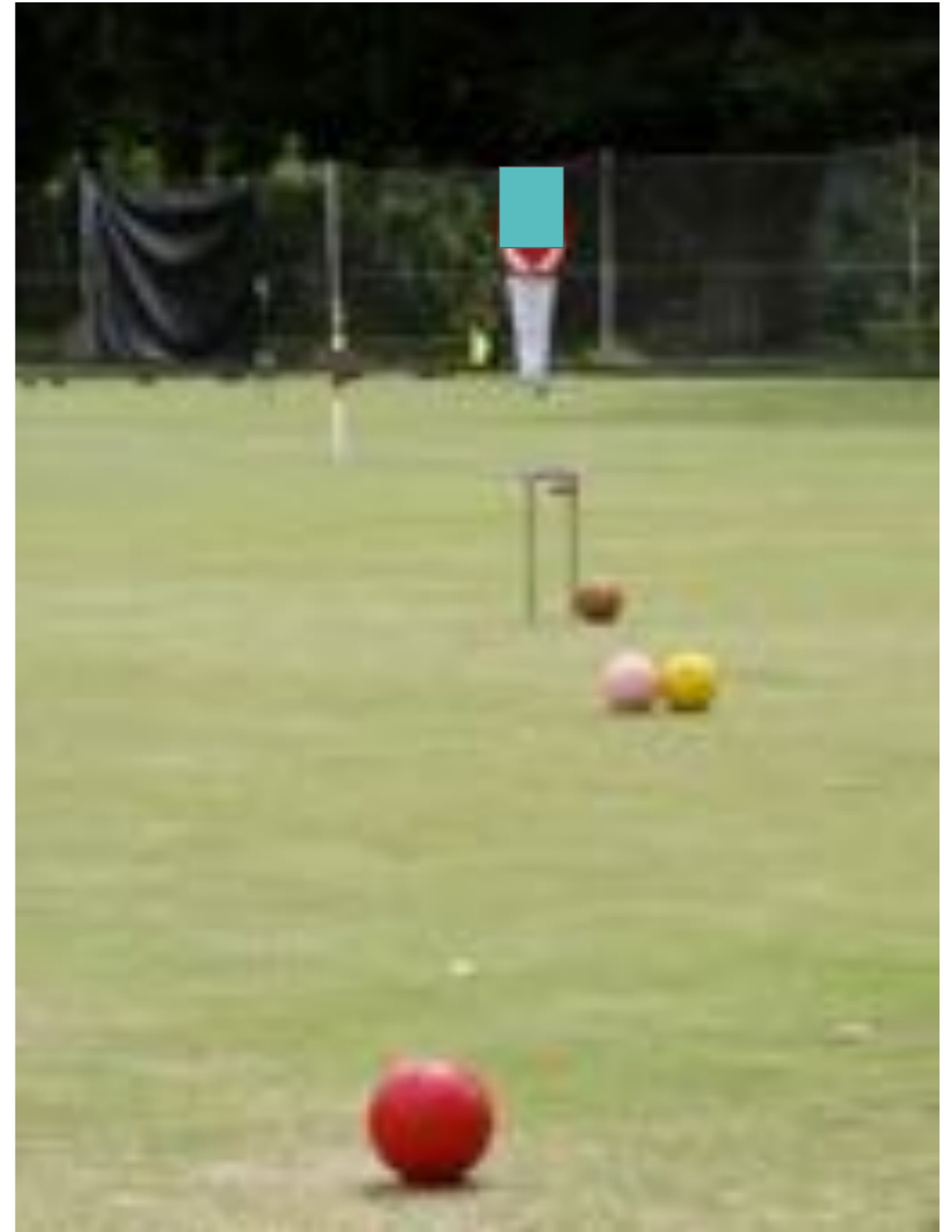
Blue is the claimants ball, assessing lifting entitlement on the yellow (and red) balls. Balls are approximately 20 yards apart.

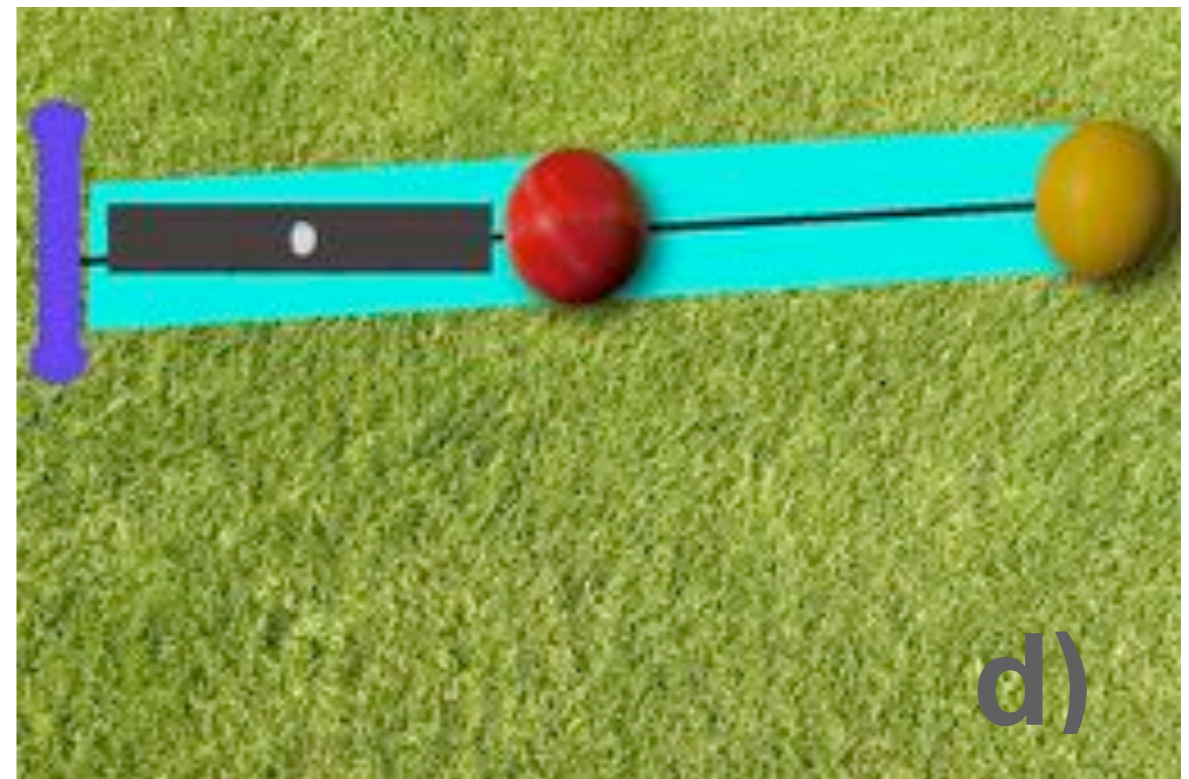
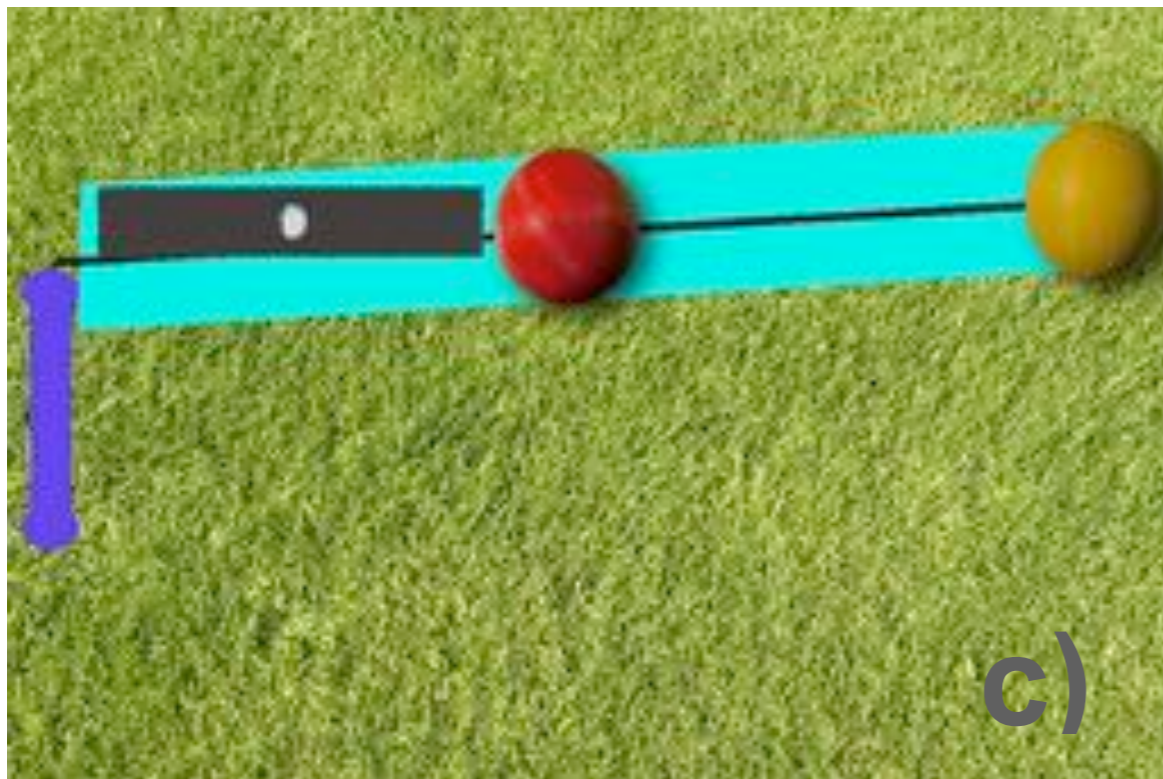
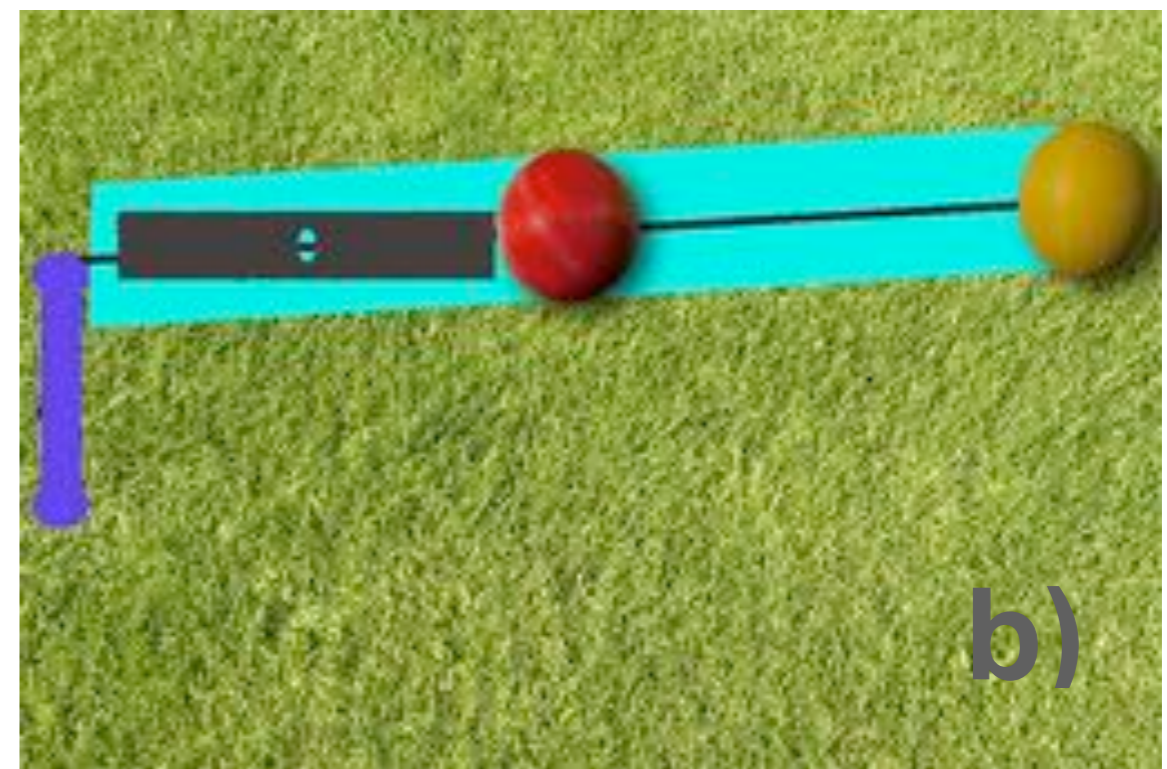
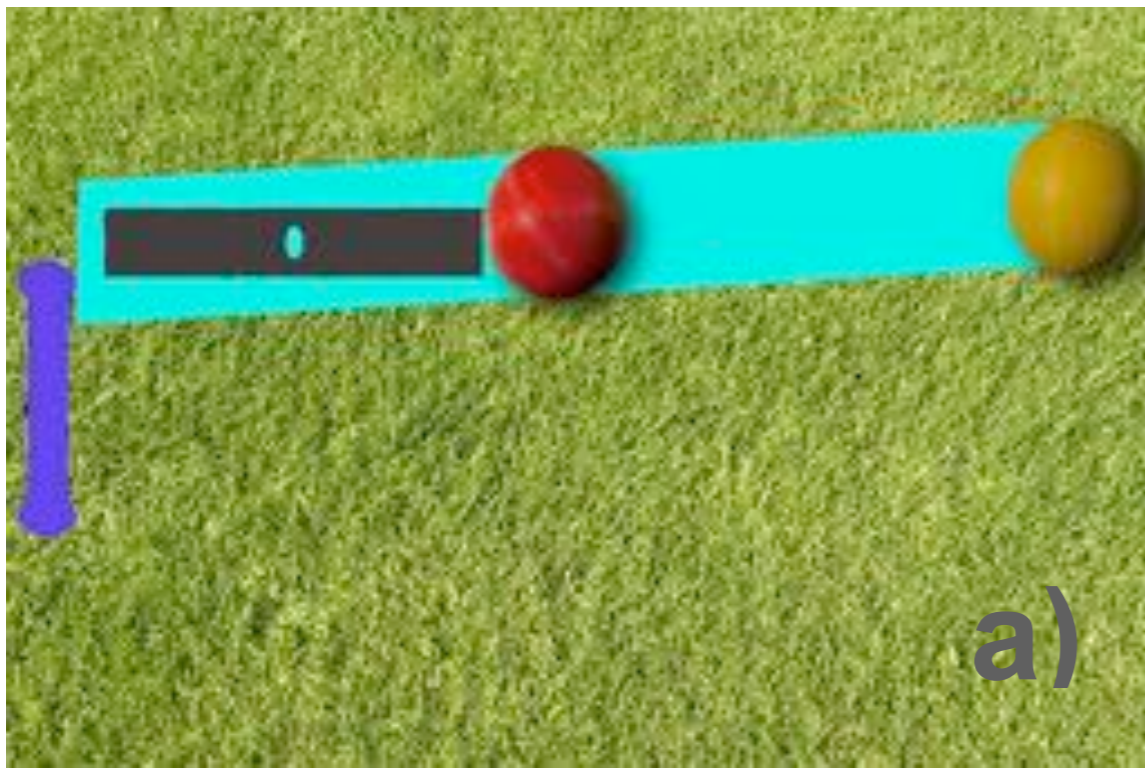
Good view at the level of the ball, and ONLY the brown ball is required here.

Note the wire was not given, but the second “test ball” (viz pink is placed touching the target ball Y in question). Placement of the Pink ball may contaminate the evidence, hence not the best practice.

(This was in fact “requested” by the players, in spite of the better judgement of the referee, *who was under NO obligation to concede this request*, but then agreed having carefully marked yellow, having cautioned the possible movement of the Y ball!)

The decision was upheld to be correct, NO wiring entitlement the eye along (from the referee’s angle), left side blue ball to left side brown ball (on the hoop), examining the target ball yellow - A GAP is seen between that line and Y ball, (confirmed by seeing some of pink, as shown.)



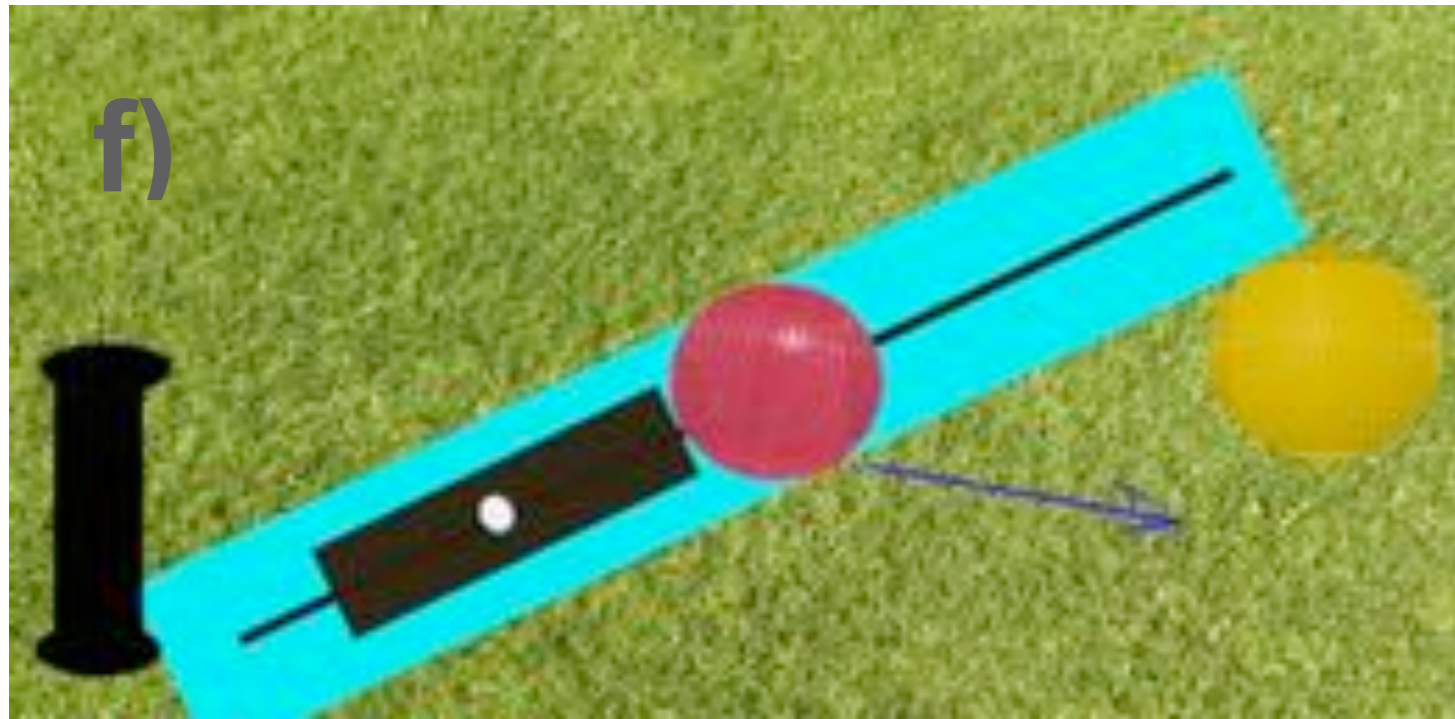
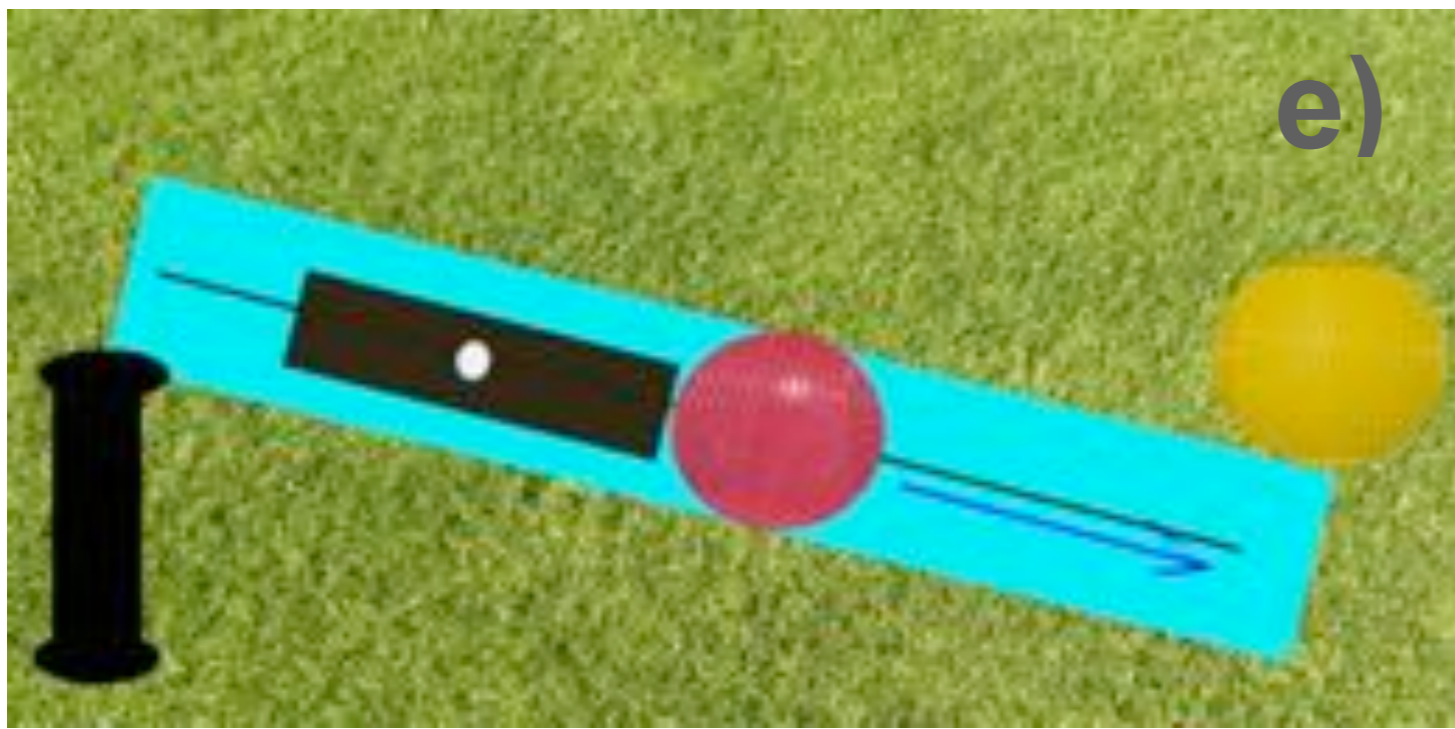


**Fig 1.12 INCORRECT application of the wiring entitlement. (Compare to Fig 1.13)**

Four diagrams showing the mallet potentially wired claiming the R asking ball, toward the Y target ball very close by.

a to c) all wired

but in d) the mallet may swing freely between the hoop without any obstruction, if central swing. Hence some may argue claimant is NOT entitled to a wiring lift?. If you use this system, remember the **R ball must be able to LEAVE the turquoise zone** indicated above, and visualised, to hit the Y target ball on either SIDE!



**Fig 1.13**

Two additional diagrams showing the mallet potentially wired claiming the R asking ball, toward the Y target ball very close by. both all wired above

e) The mallet can pass the hoop unimpeded to strike the Y ball on its right side.

f) Wiring entitlement to claimant, since clearly the R ball when struck to hit the LEFT side of target R ball will hit the right hoop



***Here is a test:***

Before looking at the figure below, the striker is claiming his B ball is wired on K? Most of us instinctively would simply instruct him to “play on” how can this possibly be wired from a ball, his partner ball in fact, 10 mm away? Look at the shadow balls and remember the wiring zone from the edge of the B ball to each edge of the K ball. Can you really cut the K target ball on the edge closest to the hoop here? He wants to rather go and play another ball in his turn!

Decision: Wired, B entitled to play from a baulk line.

