

פרק שביעי: חלון Introduction to

At the end of the previous פרק, we dealt with the relationship between various types of adjoining חצרות; this chapter will first continue that exploration to identify which barriers separate חצרות. The second half of the chapter will focus on the method of שיתופי מבוואות.

3.7.1

76a (תחילת הפרק) → 76b (אינו צריך)

Note: in rabbinic geometry, π is 3 (as opposed to 3.14...); hence the circumference of a circle will be $d3$; the diagonal of any square will be 1.4 of the side (as opposed to 1.414...); an inscribed circle will be $\frac{3}{4}$ of the area of the circumscribed square (as opposed to $\frac{\pi}{4}$).

I. משנה א': Connecting 2 חצרות via a window in the wall that divides them

a. If: if the window is ד"ד and within טפחים י' of the ground, may unite or create independent עירובין

b. But if: the window is less than ד"ד or above טפחים י' – must make independent עירובין

i. Authorship: proposal that our משנה follows רשב"ג (רבנן) who measures לבוד at ד"ט

1. Rejection: even רבנן agree that 4×4 is needed for a "significant place" although they only allow $x < 3$ for לבוד

ii. Implication: of 1st clause is that if less than 4×4 , invalid – why the need for the 2nd clause?

1. Justification: necessary to teach that even if part is within טפחים י', still valid and they may join

II. ר' יוחנן: a round window must be 24 טפחים in circumference and have 2+ within י"ט so that if squared, a part is within י"ט

a. Challenge: should only need circumference of 12 (per note)

i. Answer: that equation is only for ratios within a circle; we need to fit the circle within a square

ii. Challenge: should be 16 (add 25% for square)

1. Answer: a circumscribed circle requires more

2. Challenge: should require 16.8 (area of circle with diagonal of 5.6 [diagonal of 4×4])

a) Answer: ר' יוחנן follows קיסרים – a diagonal is 2x the sides and a circle is 1.5 of its inscribed square

b) Therefore: $16 \times 1.5 = 24$

i. Note: see ר' יוחנן ד"ה ור' יוחנן and תוספות ד"ה ור' יוחנן (they both reject דקיסרי)

III. Extension and application of rule: does it extend to making עירוב between houses or only חצרות?

a. ל"נ: only between חצרות do we require "within 10"; between houses, even higher can be joined

i. Reason: we consider a house to be "full" → there is no "higher than י"ט" there

ii. Challenge (ר"ב): ruling that between any of 2 חצרות, 2 houses, 2 lofts, 2 roofs or 2 rooms – require 4×4 within י"ט

1. First defense: ruling relates to חצרות

2. Challenge: the ברייתא uses the phrase לי ואחד... לי, equating them all

a) Rather: they are all equal for the requirement of an opening that is ד"ט x ד"ט – not for height of י"ט

b. Related question (posed to ל"נ): does an opening to a loft need a fixed ladder to connect them

i. Analysis: perhaps we only apply the principle that a house is "filled" at its border – but not in the middle

ii. Answer: it needs no fixed ladder

1. Assumption: he meant that no fixed ladder is needed, but a temporary ladder must be there

2. Rejection: ר"נ is quoted as explicitly ruling that it doesn't even require a temporary ladder in place