SQUARING YOUR TENT

Pythagorean Theorem.

In mathematics, the Pythagorean Theorem (American English) or Pythagoras' Theorem (British English) is a relation in Euclidean geometry among the three sides of a right triangle. The theorem is named after the Greek mathematician Pythagoras, who by tradition is credited with its discovery and proof, although it is often argued that knowledge of the theory predates him. The theorem is as follows:

In any right triangle, the area of the square whose side is the hypotenuse (the side opposite the right angle) is equal to the sum of the areas of the squares whose sides are the two legs (the two sides that meet at the right angle).

This is summarized as follows:

If we let C be the length of the hypotenuse and A and B be the lengths of the other two sides, the theorem can be expressed as the equation:

$$A^2 + B^2 = C^2$$

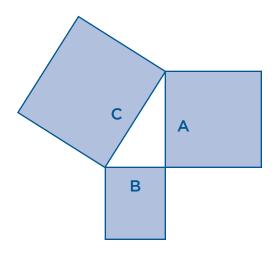
Tools You Need.

- Two, 300-feet open real tape measures.
- Four awls (screwdrivers or nails will do in a pinch).
- One small hammer to drive awls into the ground or asphalt.
- One can upside-down marking paint (use white)
- One calculator to calculate diagonal measurement using the Pythagorean Theorem, or a drawing/samples on the following page, or a layout/matrix sample on following page.

3-4-5 Rule: A=3, B=4, C=5

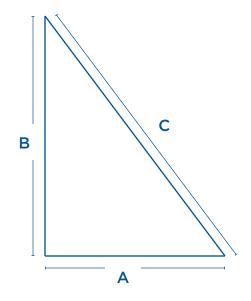
For squaring up a tent, use the 3-4-5 rule. The best place to start is in one corner of the tent layout. The corner would be a right angle with two sides. Layout the "A" dimension on the end of the tent. Next, layout the "B" dimension down the side of the tent. Then make the "C" dimension fit between the end of A and B. Now you have a square corner.

For larger projects, simply use a larger combination of making all three numbers divisible by 3-4-5, ie. 21-28-35, 30-40-50, 60-80-100.



The Pythagorean Theorem:

The sum of the areas of two squares on the legs (A and B) equals the area of the square of the hypotenuse (C).





SQUARING YOUR TENT

	20'	30'	40'	50'	60'	70'	80'	90'	100'
20'	28' 3"	36' 1"	44' 9"	53' 10"	63' 3"	72' 10"	82' 6"	92' 2"	102' 0"
30'	36' 1"	42' 5"	50' 0"	58' 4"	67' 1"	76' 2"	85' 5"	94' 10"	104' 5"
40'	44' 9"	50' 0"	56' 7"	64' 0"	72' 1"	80' 7"	89' 5"	98' 6"	107' 8"
45'	49' 3"	54' 1"	60' 3"	67' 3"	75' O"	83' 3"	91' 9"	100' 7"	102' 0"
50'	53' 10"	58' 4"	64' 0"	70' 9"	78' 1"	86' 0"	94' 4"	102' 11"	111' 10"
60'	63' 3"	67' 1"	72' 1"	78' 1"	84' 10"	82' 2"	100' 0"	108' 2"	116' 7"
70'	72' 10"	76' 2"	80' 7"	86' 0"	92' 2"	98' 6"	106' 4"	114' 0"	122' 1"
75'	77' 7"	80' 9"	85' 0"	90' 2"	96' 0"	102' 7"	109' 8"	117' 2"	125' 0"
80,	82' 6"	85' 5"	89' 5"	94' 4"	100' 0"	106' 4"	113' 2"	120' 5"	128' 1"
90'	92' 2"	94'10"	98' 6"	102' 11"	108' 2"	114' 0"	120' 5"	127' 3"	134' 6"
100'	102' 0"	104' 5"	107' 8"	111' 10"	116' 7"	122' 1"	128' 1"	134' 6"	141' 5"
110'	111' 10"	114' 0"	117' 1"	120' 10"	125' 4"	130' 5"	136' 0"	142' 2"	148' 8"
120'	121' 8"	112' 8"	126' 6"	130' 0"	134' 2"	138' 11"	144' 3"	150' 0"	156' 2"
130'	131' 6"	133' 5"	136' 0"	139' 3"	143' 2"	147' 8"	152' 8"	158' 1"	164' 0"
140'	141' 5"	143' 2"	145' 7"	148' 8"	152' 4"	156' 6"	161' 3"	166' 5"	172' 0"
150'	151' 4"	153' O"	155' 3"	158' 1"	161' 7"	165' 6"	170' 0"	174' 11"	180' 3"
160'	161' 3"	162' 9"	164' 11"	167' 7"	170' 11"	174' 8"	178' 11"	183' 6"	188' 8"
170'	171' 2"	172' 8"	174' 8"	177' 2"	180' 3"	183' 10"	187' 11"	192' 4"	197' 3"
180'	181' 1"	182' 6"	184' 5"	186' 10"	189' 9"	193' 2"	197' O"	202' 3"	205' 11"
190'	191' 1"	192' 4"	194' 2"	196' 6"	199' 3"	202' 6"	206' 2"	210' 3"	214' 9"
200'	201' 0"	202' 3"	204' 0"	206' 2"	208' 10"	211' 11"	215' 5"	219' 4"	223' 7"
210'	211' O"	212' 2"	213' 9"	215' 10"	218' 5"	221' 4"	224' 8"	228' 6"	232' 7"
220'	221' O"	222' 0"	223' 7"	225' 7"	228' 0"	230' 10"	234' 1"	237' 8"	241' 8"

