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SquarefreePart[n_Integer?Positive] :=
  Times@@Power@@@({#[[1]], Mod#[[2]], 2]} & /@FactorInteger[n]

For[n = 2, n < 20, n++,
  For[m = 1, m < n, m++,
    If[GCD[m, n] == 1, Print["(m,n) = (", m, ",", n, ")", Pythagorean Triple = (" , n^2 - m^2, ", " ,
      2 m * n, ", n^2 + m^2, ")", Congruent number = ", SquarefreePart[m * n * (n^2 - m^2)]]]]]]

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(m,n) = (1,2), Pythagorean Triple = (3,4,5), Congruent number = 6
(m,n) = (1,3), Pythagorean Triple = (8,6,10), Congruent number = 6
(m,n) = (2,3), Pythagorean Triple = (5,12,13), Congruent number = 30
(m,n) = (1,4), Pythagorean Triple = (15,8,17), Congruent number = 15
(m,n) = (3,4), Pythagorean Triple = (7,24,25), Congruent number = 21
(m,n) = (1,5), Pythagorean Triple = (24,10,26), Congruent number = 30
(m,n) = (2,5), Pythagorean Triple = (21,20,29), Congruent number = 210
(m,n) = (3,5), Pythagorean Triple = (16,30,34), Congruent number = 15
(m,n) = (4,5), Pythagorean Triple = (9,40,41), Congruent number = 5
(m,n) = (1,6), Pythagorean Triple = (35,12,37), Congruent number = 210
(m,n) = (5,6), Pythagorean Triple = (11,60,61), Congruent number = 330
(m,n) = (1,7), Pythagorean Triple = (48,14,50), Congruent number = 21
(m,n) = (2,7), Pythagorean Triple = (45,28,53), Congruent number = 70
(m,n) = (3,7), Pythagorean Triple = (40,42,58), Congruent number = 210
(m,n) = (4,7), Pythagorean Triple = (33,56,65), Congruent number = 231
(m,n) = (5,7), Pythagorean Triple = (24,70,74), Congruent number = 210
(m,n) = (6,7), Pythagorean Triple = (13,84,85), Congruent number = 546
(m,n) = (1,8), Pythagorean Triple = (63,16,65), Congruent number = 14
(m,n) = (3,8), Pythagorean Triple = (55,48,73), Congruent number = 330
(m,n) = (5,8), Pythagorean Triple = (39,80,89), Congruent number = 390
(m,n) = (7,8), Pythagorean Triple = (15,112,113), Congruent number = 210
(m,n) = (1,9), Pythagorean Triple = (80,18,82), Congruent number = 5
(m,n) = (2,9), Pythagorean Triple = (77,36,85), Congruent number = 154
(m,n) = (4,9), Pythagorean Triple = (65,72,97), Congruent number = 65
(m,n) = (5,9), Pythagorean Triple = (56,90,106), Congruent number = 70
(m,n) = (7,9), Pythagorean Triple = (32,126,130), Congruent number = 14
(m,n) = (8,9), Pythagorean Triple = (17,144,145), Congruent number = 34
(m,n) = (1,10), Pythagorean Triple = (99,20,101), Congruent number = 110
(m,n) = (3,10), Pythagorean Triple = (91,60,109), Congruent number = 2730
(m,n) = (7,10), Pythagorean Triple = (51,140,149), Congruent number = 3570
(m,n) = (9,10), Pythagorean Triple = (19,180,181), Congruent number = 190

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$(m,n) = (1,11)$, Pythagorean Triple = $(120,22,122)$, Congruent number = 330
 $(m,n) = (2,11)$, Pythagorean Triple = $(117,44,125)$, Congruent number = 286
 $(m,n) = (3,11)$, Pythagorean Triple = $(112,66,130)$, Congruent number = 231
 $(m,n) = (4,11)$, Pythagorean Triple = $(105,88,137)$, Congruent number = 1155
 $(m,n) = (5,11)$, Pythagorean Triple = $(96,110,146)$, Congruent number = 330
 $(m,n) = (6,11)$, Pythagorean Triple = $(85,132,157)$, Congruent number = 5610
 $(m,n) = (7,11)$, Pythagorean Triple = $(72,154,170)$, Congruent number = 154
 $(m,n) = (8,11)$, Pythagorean Triple = $(57,176,185)$, Congruent number = 1254
 $(m,n) = (9,11)$, Pythagorean Triple = $(40,198,202)$, Congruent number = 110
 $(m,n) = (10,11)$, Pythagorean Triple = $(21,220,221)$, Congruent number = 2310
 $(m,n) = (1,12)$, Pythagorean Triple = $(143,24,145)$, Congruent number = 429
 $(m,n) = (5,12)$, Pythagorean Triple = $(119,120,169)$, Congruent number = 1785
 $(m,n) = (7,12)$, Pythagorean Triple = $(95,168,193)$, Congruent number = 1995
 $(m,n) = (11,12)$, Pythagorean Triple = $(23,264,265)$, Congruent number = 759
 $(m,n) = (1,13)$, Pythagorean Triple = $(168,26,170)$, Congruent number = 546
 $(m,n) = (2,13)$, Pythagorean Triple = $(165,52,173)$, Congruent number = 4290
 $(m,n) = (3,13)$, Pythagorean Triple = $(160,78,178)$, Congruent number = 390
 $(m,n) = (4,13)$, Pythagorean Triple = $(153,104,185)$, Congruent number = 221
 $(m,n) = (5,13)$, Pythagorean Triple = $(144,130,194)$, Congruent number = 65
 $(m,n) = (6,13)$, Pythagorean Triple = $(133,156,205)$, Congruent number = 10 374
 $(m,n) = (7,13)$, Pythagorean Triple = $(120,182,218)$, Congruent number = 2730
 $(m,n) = (8,13)$, Pythagorean Triple = $(105,208,233)$, Congruent number = 2730
 $(m,n) = (9,13)$, Pythagorean Triple = $(88,234,250)$, Congruent number = 286
 $(m,n) = (10,13)$, Pythagorean Triple = $(69,260,269)$, Congruent number = 8970
 $(m,n) = (11,13)$, Pythagorean Triple = $(48,286,290)$, Congruent number = 429
 $(m,n) = (12,13)$, Pythagorean Triple = $(25,312,313)$, Congruent number = 39
 $(m,n) = (1,14)$, Pythagorean Triple = $(195,28,197)$, Congruent number = 2730
 $(m,n) = (3,14)$, Pythagorean Triple = $(187,84,205)$, Congruent number = 7854
 $(m,n) = (5,14)$, Pythagorean Triple = $(171,140,221)$, Congruent number = 1330
 $(m,n) = (9,14)$, Pythagorean Triple = $(115,252,277)$, Congruent number = 1610
 $(m,n) = (11,14)$, Pythagorean Triple = $(75,308,317)$, Congruent number = 462
 $(m,n) = (13,14)$, Pythagorean Triple = $(27,364,365)$, Congruent number = 546
 $(m,n) = (1,15)$, Pythagorean Triple = $(224,30,226)$, Congruent number = 210
 $(m,n) = (2,15)$, Pythagorean Triple = $(221,60,229)$, Congruent number = 6630
 $(m,n) = (4,15)$, Pythagorean Triple = $(209,120,241)$, Congruent number = 3135

$(m,n) = (7,15)$, Pythagorean Triple = $(176,210,274)$, Congruent number = 1155
 $(m,n) = (8,15)$, Pythagorean Triple = $(161,240,289)$, Congruent number = 4830
 $(m,n) = (11,15)$, Pythagorean Triple = $(104,330,346)$, Congruent number = 4290
 $(m,n) = (13,15)$, Pythagorean Triple = $(56,390,394)$, Congruent number = 2730
 $(m,n) = (14,15)$, Pythagorean Triple = $(29,420,421)$, Congruent number = 6090
 $(m,n) = (1,16)$, Pythagorean Triple = $(255,32,257)$, Congruent number = 255
 $(m,n) = (3,16)$, Pythagorean Triple = $(247,96,265)$, Congruent number = 741
 $(m,n) = (5,16)$, Pythagorean Triple = $(231,160,281)$, Congruent number = 1155
 $(m,n) = (7,16)$, Pythagorean Triple = $(207,224,305)$, Congruent number = 161
 $(m,n) = (9,16)$, Pythagorean Triple = $(175,288,337)$, Congruent number = 7
 $(m,n) = (11,16)$, Pythagorean Triple = $(135,352,377)$, Congruent number = 165
 $(m,n) = (13,16)$, Pythagorean Triple = $(87,416,425)$, Congruent number = 1131
 $(m,n) = (15,16)$, Pythagorean Triple = $(31,480,481)$, Congruent number = 465
 $(m,n) = (1,17)$, Pythagorean Triple = $(288,34,290)$, Congruent number = 34
 $(m,n) = (2,17)$, Pythagorean Triple = $(285,68,293)$, Congruent number = 9690
 $(m,n) = (3,17)$, Pythagorean Triple = $(280,102,298)$, Congruent number = 3570
 $(m,n) = (4,17)$, Pythagorean Triple = $(273,136,305)$, Congruent number = 4641
 $(m,n) = (5,17)$, Pythagorean Triple = $(264,170,314)$, Congruent number = 5610
 $(m,n) = (6,17)$, Pythagorean Triple = $(253,204,325)$, Congruent number = 25806
 $(m,n) = (7,17)$, Pythagorean Triple = $(240,238,338)$, Congruent number = 1785
 $(m,n) = (8,17)$, Pythagorean Triple = $(225,272,353)$, Congruent number = 34
 $(m,n) = (9,17)$, Pythagorean Triple = $(208,306,370)$, Congruent number = 221
 $(m,n) = (10,17)$, Pythagorean Triple = $(189,340,389)$, Congruent number = 3570
 $(m,n) = (11,17)$, Pythagorean Triple = $(168,374,410)$, Congruent number = 7854
 $(m,n) = (12,17)$, Pythagorean Triple = $(145,408,433)$, Congruent number = 7395
 $(m,n) = (13,17)$, Pythagorean Triple = $(120,442,458)$, Congruent number = 6630
 $(m,n) = (14,17)$, Pythagorean Triple = $(93,476,485)$, Congruent number = 22134
 $(m,n) = (15,17)$, Pythagorean Triple = $(64,510,514)$, Congruent number = 255
 $(m,n) = (16,17)$, Pythagorean Triple = $(33,544,545)$, Congruent number = 561
 $(m,n) = (1,18)$, Pythagorean Triple = $(323,36,325)$, Congruent number = 646
 $(m,n) = (5,18)$, Pythagorean Triple = $(299,180,349)$, Congruent number = 2990
 $(m,n) = (7,18)$, Pythagorean Triple = $(275,252,373)$, Congruent number = 154
 $(m,n) = (11,18)$, Pythagorean Triple = $(203,396,445)$, Congruent number = 4466
 $(m,n) = (13,18)$, Pythagorean Triple = $(155,468,493)$, Congruent number = 4030
 $(m,n) = (17,18)$, Pythagorean Triple = $(35,612,613)$, Congruent number = 1190

(m,n) = (1,19), Pythagorean Triple = (360,38,362), Congruent number = 190
(m,n) = (2,19), Pythagorean Triple = (357,76,365), Congruent number = 13 566
(m,n) = (3,19), Pythagorean Triple = (352,114,370), Congruent number = 1254
(m,n) = (4,19), Pythagorean Triple = (345,152,377), Congruent number = 6555
(m,n) = (5,19), Pythagorean Triple = (336,190,386), Congruent number = 1995
(m,n) = (6,19), Pythagorean Triple = (325,228,397), Congruent number = 1482
(m,n) = (7,19), Pythagorean Triple = (312,266,410), Congruent number = 10 374
(m,n) = (8,19), Pythagorean Triple = (297,304,425), Congruent number = 1254
(m,n) = (9,19), Pythagorean Triple = (280,342,442), Congruent number = 1330
(m,n) = (10,19), Pythagorean Triple = (261,380,461), Congruent number = 5510
(m,n) = (11,19), Pythagorean Triple = (240,418,482), Congruent number = 3135
(m,n) = (12,19), Pythagorean Triple = (217,456,505), Congruent number = 12 369
(m,n) = (13,19), Pythagorean Triple = (192,494,530), Congruent number = 741
(m,n) = (14,19), Pythagorean Triple = (165,532,557), Congruent number = 43 890
(m,n) = (15,19), Pythagorean Triple = (136,570,586), Congruent number = 9690
(m,n) = (16,19), Pythagorean Triple = (105,608,617), Congruent number = 1995
(m,n) = (17,19), Pythagorean Triple = (72,646,650), Congruent number = 646
(m,n) = (18,19), Pythagorean Triple = (37,684,685), Congruent number = 1406