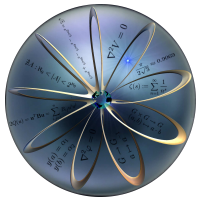

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first primitive Pythagorean triplets

Canonical name	FirstPrimitivePythagoreanTriplets
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Entry type	Example
Classification	msc 01A16
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Synonym	least coprime Pythagorean triplets
Related topic	PythagorasTheorem
Related topic	IncircleRadiusDeterminedByPythagoreanTriple
Related topic	ContraharmonicMeansAndPythagoreanHypotenuses
Related topic	PythagoreanHypotenusesAsContraharmonicMeans
Defines	Egyptian triangle

(odd cathetus)^2 + (even cathetus)^2 = (hypotenuse)^2

$3^2 + 4^2 = 5^2$ (← these form the so-called *Egyptian triangle*, known by the pyramid builders)
$5^2 + 12^2 = 13^2$
$15^2 + 8^2 = 17^2$
$7^2 + 24^2 = 25^2$
$21^2 + 20^2 = 29^2$
$9^2 + 40^2 = 41^2$
$35^2 + 12^2 = 37^2$
$11^2 + 60^2 = 61^2$
$45^2 + 28^2 = 53^2$
$33^2 + 56^2 = 65^2$
$13^2 + 84^2 = 85^2$
$63^2 + 16^2 = 65^2$
$55^2 + 48^2 = 73^2$
$39^2 + 80^2 = 89^2$
$15^2 + 112^2 = 113^2$
$77^2 + 36^2 = 85^2$
$65^2 + 72^2 = 97^2$
$17^2 + 144^2 = 145^2$
$99^2 + 20^2 = 101^2$
$91^2 + 60^2 = 109^2$
$51^2 + 140^2 = 149^2$
$19^2 + 180^2 = 181^2$
$117^2 + 44^2 = 125^2$
$105^2 + 88^2 = 137^2$
$85^2 + 132^2 = 157^2$
$57^2 + 176^2 = 185^2$
$21^2 + 220^2 = 221^2$
$143^2 + 24^2 = 145^2$
$119^2 + 120^2 = 169^2$
$95^2 + 168^2 = 193^2$
$23^2 + 264^2 = 265^2$
$165^2 + 52^2 = 173^2$
$153^2 + 104^2 = 185^2$
$133^2 + 156^2 = 205^2$
$105^2 + 208^2 = 233^2$

$69^2 + 260^2 = 269^2$
$25^2 + 312^2 = 313^2$
$195^2 + 28^2 = 197^2$
$187^2 + 84^2 = 205^2$
$171^2 + 140^2 = 221^2$
$115^2 + 252^2 = 277^2$
$75^2 + 308^2 = 317^2$
$27^2 + 364^2 = 365^2$
$221^2 + 60^2 = 229^2$
$209^2 + 120^2 = 241^2$
$161^2 + 240^2 = 289^2$
$29^2 + 420^2 = 421^2$
$255^2 + 32^2 = 257^2$
$247^2 + 96^2 = 265^2$
$231^2 + 160^2 = 281^2$
$207^2 + 224^2 = 305^2$
$175^2 + 288^2 = 337^2$
$135^2 + 352^2 = 377^2$
$87^2 + 416^2 = 425^2$
$31^2 + 480^2 = 481^2$
$285^2 + 68^2 = 293^2$
$273^2 + 136^2 = 305^2$
$253^2 + 204^2 = 325^2$
$225^2 + 272^2 = 353^2$
$189^2 + 340^2 = 389^2$
$145^2 + 408^2 = 433^2$
$93^2 + 476^2 = 485^2$
$33^2 + 544^2 = 545^2$
$323^2 + 36^2 = 325^2$
$299^2 + 180^2 = 349^2$
$275^2 + 252^2 = 373^2$
$203^2 + 396^2 = 445^2$
$155^2 + 468^2 = 493^2$
$35^2 + 612^2 = 613^2$
$357^2 + 76^2 = 365^2$
$345^2 + 152^2 = 377^2$
$325^2 + 228^2 = 397^2$
$297^2 + 304^2 = 425^2$

$261^2 + 380^2 = 461^2$
$217^2 + 456^2 = 505^2$
$165^2 + 532^2 = 557^2$
$105^2 + 608^2 = 617^2$
$37^2 + 684^2 = 685^2$
$399^2 + 40^2 = 401^2$
$391^2 + 120^2 = 409^2$
$351^2 + 280^2 = 449^2$
$319^2 + 360^2 = 481^2$
$279^2 + 440^2 = 521^2$
$231^2 + 520^2 = 569^2$
$111^2 + 680^2 = 689^2$
$39^2 + 760^2 = 761^2$
$437^2 + 84^2 = 445^2$
$425^2 + 168^2 = 457^2$
$377^2 + 336^2 = 505^2$
$341^2 + 420^2 = 541^2$
$185^2 + 672^2 = 697^2$
$41^2 + 840^2 = 841^2$
$483^2 + 44^2 = 485^2$
$475^2 + 132^2 = 493^2$
$459^2 + 220^2 = 509^2$
$435^2 + 308^2 = 533^2$
$403^2 + 396^2 = 565^2$
$315^2 + 572^2 = 653^2$
$259^2 + 660^2 = 709^2$
$195^2 + 748^2 = 773^2$
$123^2 + 836^2 = 845^2$
$43^2 + 924^2 = 925^2$
$525^2 + 92^2 = 533^2$
$513^2 + 184^2 = 545^2$
$493^2 + 276^2 = 565^2$
$465^2 + 368^2 = 593^2$
$429^2 + 460^2 = 629^2$
$385^2 + 552^2 = 673^2$
$333^2 + 644^2 = 725^2$
$273^2 + 736^2 = 785^2$
$205^2 + 828^2 = 853^2$

$129^2 + 920^2 = 929^2$
$45^2 + 1012^2 = 1013^2$
$575^2 + 48^2 = 577^2$
$551^2 + 240^2 = 601^2$
$527^2 + 336^2 = 625^2$
$455^2 + 528^2 = 697^2$
$407^2 + 624^2 = 745^2$
$287^2 + 816^2 = 865^2$
$215^2 + 912^2 = 937^2$
$47^2 + 1104^2 = 1105^2$
$621^2 + 100^2 = 629^2$
$609^2 + 200^2 = 641^2$
$589^2 + 300^2 = 661^2$
$561^2 + 400^2 = 689^2$
$481^2 + 600^2 = 769^2$
$429^2 + 700^2 = 821^2$
$369^2 + 800^2 = 881^2$
$301^2 + 900^2 = 949^2$
$141^2 + 1100^2 = 1109^2$
$49^2 + 1200^2 = 1201^2$
$675^2 + 52^2 = 677^2$
$667^2 + 156^2 = 685^2$
$651^2 + 260^2 = 701^2$
$627^2 + 364^2 = 725^2$
$595^2 + 468^2 = 757^2$
$555^2 + 572^2 = 797^2$
$451^2 + 780^2 = 901^2$
$387^2 + 884^2 = 965^2$
$315^2 + 988^2 = 1037^2$
$235^2 + 1092^2 = 1117^2$
$147^2 + 1196^2 = 1205^2$
$51^2 + 1300^2 = 1301^2$
$725^2 + 108^2 = 733^2$
$713^2 + 216^2 = 745^2$
$665^2 + 432^2 = 793^2$
$629^2 + 540^2 = 829^2$
$533^2 + 756^2 = 925^2$
$473^2 + 864^2 = 985^2$

$329^2 + 1080^2 = 1129^2$
$245^2 + 1188^2 = 1213^2$
$53^2 + 1404^2 = 1405^2$

N.B. that the lengths of the even cathetus and the hypotenuse are consecutive integers (as 1404 and 1405) always when the corresponding seed numbers m and n (see the `http://planetmath.org/PythagoreanTriplet`parent entry) are successive integers.