Pythagorean Triples (Triplets)

The following triples, and any multiple, always make a right triangle.

9, 12, 15

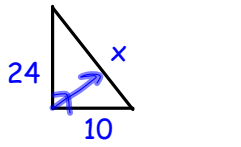
- 3, 4, 5 → 30, 40, 50
- 5, 12, 13

7, 24, 25

8, 15, 17

20, 21, 29

Find the missing length of the triangle:



5, 12, 13 times 2

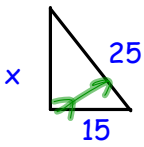
$x = 26$

$a^2 + 24^2 = 26^2$

$a^2 + 576 = 676$

$a^2 = 100$

$a = 10$



3, 4, 5 times 5

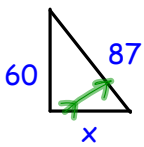
$x = 20$

$a^2 + 15^2 = 25^2$

$a^2 + 225 = 625$

$a^2 = 400$

$a = 20$



20, 21, 29 times 3

$x = 63$

$60^2 + x^2 = 87^2$

$3600 + x^2 = 7569$

$x^2 = 3969$

$x = 63$

Classwork: WB p. 129

HW: WB p. 130

$330 \div \frac{20}{100}$

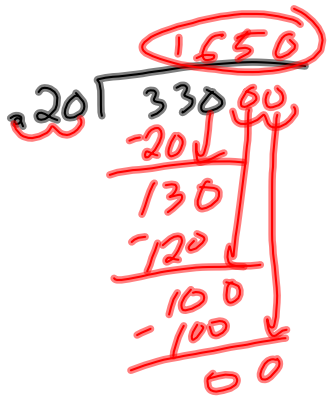
$330 \cdot \frac{10}{2}$

$330 \cdot 5$

1330

$\times 5$

1650

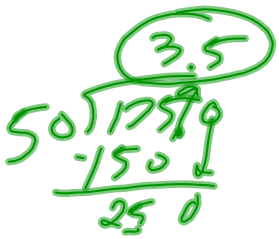


3.14

$\times 8$

512

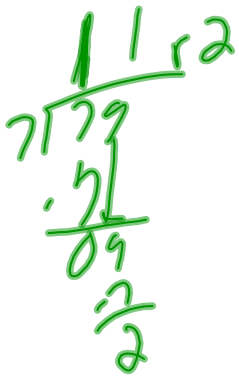
$\frac{1}{8} \div \frac{5}{8} = \frac{-4}{8} = -\frac{1}{2}$



6 12 18 24 30 36 42 48

8 16 24 32 40 48 24

40



abcdabcdabcd . . . .

What is the 143 letter?