

Pre Algebra with Pizzazz 163.

- ?
1. $a^2 + b^2 = c^2$? $3^2 + 4^2 = 5^2$ $9 + 16 = 25$ Rt. triangle
 2. $a^2 + b^2 = c^2$ $4^2 + 5^2 = 6^2$ $16 + 25 \neq 36$ NOT
 3. $a^2 + b^2 = c^2$ $5^2 + 12^2 = 13^2$ $25 + 144 = 169$ Rt. triangle
 4. $a^2 + b^2 = c^2$ $6^2 + 9^2 = 11^2$ $36 + 81 \neq 121$ NOT
 5. $a^2 + b^2 = c^2$ $7^2 + 24^2 = 25^2$ $49 + 576 = 625$ Rt. Δ
 6. $a^2 + b^2 = c^2$ $8^2 + 10^2 = 13^2$ $64 + 100 \neq 169$ NOT
 7. $a^2 + b^2 = c^2$ $6^2 + 11^2 = \sqrt{157}^2$ $36 + 121 = 157$ Rt. Δ
 8. $a^2 + b^2 = c^2$ $9^2 + \sqrt{115}^2 = 14^2$ $81 + 115 = 196$ Rt. Δ
 9. $a^2 + b^2 = c^2$ $\sqrt{24}^2 + 7^2 = 9^2$ $24 + 49 \neq 81$ NOT
 10. $a^2 + b^2 = c^2$ $12^2 + 20^2 = 24^2$ $144 + 400 \neq 576$ NOT
 11. $a^2 + b^2 = c^2$ $9^2 + 40^2 = 41^2$ $81 + 1600 = 1681$ Rt. Δ
 12. $a^2 + b^2 = c^2$ $1.5^2 + 2^2 = 2.5^2$ $2.25 + 4 = 6.25$ Rt. Δ
 13. $a^2 + b^2 = c^2$ $2.2^2 + 3^2 = 3.8^2$ $4.84 + 9 \neq 14.44$ NOT
 14. $a^2 + b^2 = c^2$ $10^2 + 16^2 = \sqrt{356}^2$ $100 + 256 = 356$ Rt. Δ
 15. $a^2 + b^2 = c^2$ $4^2 + \sqrt{150}^2 = 13^2$ $16 + 150 \neq 169$ NOT
 16. $a^2 + b^2 = c^2$ $\sqrt{139}^2 + 12^2 = 17^2$ $139 + 144 \neq 289$ NOT
 17. $a^2 + b^2 = c^2$ $30^2 + 40^2 = 50^2$ $900 + 1600 = 2500$ Rt. Δ
 18. $a^2 + b^2 = c^2$ $10^2 + 24^2 = 26^2$ $100 + 576 = 676$ Rt. Δ
 19. $a^2 + b^2 = c^2$ $\sqrt{7}^2 + \sqrt{8}^2 = \sqrt{14}^2$ $7 + 8 \neq 14$ NOT
 20. $a^2 + b^2 = c^2$ $.8^2 + 1.5^2 = 1.7^2$ $.64 + 2.25 = 2.89$ Rt. Δ
 21. $a^2 + b^2 = c^2$ $4.5^2 + 4.5^2 = 7^2$ $20.25 + 20.25 \neq 49$ NOT
 22. $a^2 + b^2 = c^2$ $1^2 + 2^2 = 3^2$ $1 + 4 \neq 9$ NOT

Get The Message



RIGHT TRIANGLE NOT A RIGHT TRIANGLE

DIRECTIONS:

Determine whether or not the given numbers are possible measures for the sides of a right triangle. Circle the appropriate letter next to each set of measures.

When you finish, print the circled letters in the row of boxes at the bottom of the page. FIRST print those from the column marked "Right Triangle," THEN print those from the column marked "Not a Right Triangle."

A MESSAGE WILL APPEAR!



① $a = 3, b = 4, c = 5$	<input checked="" type="radio"/> D	<input type="radio"/> E
② $a = 4, b = 5, c = 6$	<input type="radio"/> R	<input checked="" type="radio"/> V
③ $a = 5, b = 12, c = 13$	<input type="radio"/> O	<input type="radio"/> A
④ $a = 6, b = 9, c = 11$	<input type="radio"/> L	<input checked="" type="radio"/> E
⑤ $a = 7, b = 24, c = 25$	<input checked="" type="radio"/> G	<input type="radio"/> R
⑥ $a = 8, b = 10, c = 13$	<input type="radio"/> F	<input checked="" type="radio"/> A
⑦ $a = 6, b = 11, c = \sqrt{157}$	<input checked="" type="radio"/> S	<input type="radio"/> R
⑧ $a = 9, b = \sqrt{115}, c = 14$	<input type="radio"/> O	<input type="radio"/> L
⑨ $a = \sqrt{24}, b = 7, c = 9$	<input type="radio"/> N	<input checked="" type="radio"/> B
⑩ $a = 12, b = 20, c = 24$	<input type="radio"/> R	<input checked="" type="radio"/> U
⑪ $a = 9, b = 40, c = 41$	<input checked="" type="radio"/> F	<input type="radio"/> N
⑫ $a = 1.5, b = 2, c = 2.5$	<input checked="" type="radio"/> T	<input type="radio"/> B
⑬ $a = 2.2, b = 3, c = 3.8$	<input type="radio"/> E	<input checked="" type="radio"/> F
⑭ $a = 10, b = 16, c = \sqrt{356}$	<input checked="" type="radio"/> E	<input type="radio"/> I
⑮ $a = 4, b = \sqrt{150}, c = 13$	<input type="radio"/> N	<input checked="" type="radio"/> F
⑯ $a = \sqrt{139}, b = 12, c = 17$	<input type="radio"/> R	<input checked="" type="radio"/> L
⑰ $a = 30, b = 40, c = 50$	<input checked="" type="radio"/> N	<input type="radio"/> E
⑱ $a = 10, b = 24, c = 26$	<input checked="" type="radio"/> H	<input type="radio"/> A
⑲ $a = \sqrt{7}, b = \sqrt{8}, c = \sqrt{14}$	<input type="radio"/> E	<input checked="" type="radio"/> I
⑳ $a = 0.8, b = 1.5, c = 1.7$	<input checked="" type="radio"/> A	<input type="radio"/> N
㉑ $a = 4.5, b = 4.5, c = 7$	<input type="radio"/> D	<input checked="" type="radio"/> F
㉒ $a = 1, b = 2, c = 3$	<input type="radio"/> L	<input checked="" type="radio"/> E

FIRST PRINT THE CIRCLED LETTERS FROM THE "RIGHT TRIANGLE" COLUMN, THEN FROM THE OTHER COLUMN.

D O G S O F T E N H A V E A R U F F L I F C