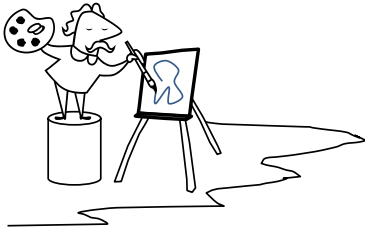


TABLE ART - ALGEBRA

NAME: _____

Every week certain classes come together to do an art project with Miss Delly. Today Mrs. Ling and Mr. Holler's class are working together. Before the students arrived, Miss Delly realized she does not have enough art supplies for each student. Each classroom table can sit 6 students together. She has enough crayons for each student, but every two students will have to share a box of color pencils, and every three students will have to share a paint set. Miss Delly knows she needs 132 art supplies total, but how many tables will she need?



ANSWER AND HELP

If you use "s" to represent the number of students, you can calculate how many there are using the total number of art supplies.

$$s + \frac{s}{2} + \frac{s}{3} = 132$$

s = Total number of crayons.

$\frac{s}{2}$ = Total boxes of color pencils. Since two students share she needs half.

$\frac{s}{3}$ = Total paint sets. Since three students share she needs one-third.

Common Denominator is 6, so change all fractions.

$$\frac{6s}{6} + \frac{3s}{6} + \frac{2s}{6} = 132 \quad \longrightarrow \quad \frac{11s}{6} = 132 \quad \longrightarrow \quad s = 72 \text{ students}$$

Miss Delly has 72 students and each desk can sit 6 students so she will need 12 desks. $72 \text{ divided by } 6 = 12$.