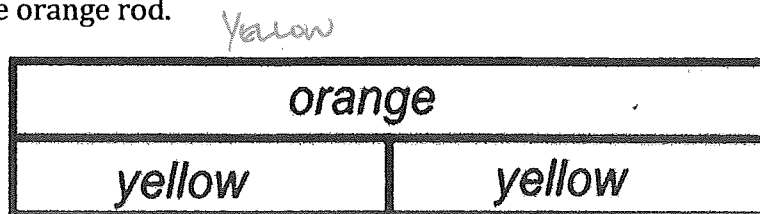


Cuisenaire Problem

- 1.) Let the orange rod (or strip) represent one whole; $\frac{1}{2}$ is represented by one of two pieces of the same length that compose the whole. Find two rods of the same color that, when placed end to end, have the same length as the orange rod.



- 2.) Now let the dark green rod be the whole. Which color represents each of the following fractions?

a) $\frac{1}{2}$ is lt. green

b) $\frac{1}{3}$ is red

c) $\frac{1}{4}$ is CANNOT BE DONE

d) 1 and $\frac{1}{4}$ is BROWN

e) 1 and $\frac{1}{6}$ is BLACK

Using magenta as a whole, find the rods that represent these values:

a) 2 and $\frac{1}{4}$ is BLUE

b) 1 and $\frac{1}{2}$ is DK GREEN

c) $\frac{3}{4}$ is lt. green

- 4.) Using the brown rod as a whole, find the value of these rods:

a) light green is $\frac{3}{8}$

b) orange is $\frac{10}{8} = \frac{5}{4} = 1\frac{1}{4}$

c) blue is $\frac{4}{8} = \frac{1}{2}$

- 5.) Which color rod satisfies each condition below?

a) red is $\frac{1}{2}$ of Magenta

b) DK. green is $\frac{3}{4}$ of brown

c) lt. green is $\frac{3}{5}$ of yellow

d) DK. green is $\frac{2}{3}$ of blue

6.) If light green is: (fill in the color of the correct rod)

a) $\frac{1}{3}$, the whole is blue

b) 1 and $\frac{1}{3}$, the whole is CANNOT BE DONE

c) $\frac{3}{7}$, the whole is blue

d) $\frac{3}{4}$, the whole is MAGENTA

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Did you find that some problems were impossible? Which ones? Why? What could be done to answer the questions?