

To make an orange dye, 3 parts of red dye are mixed with 2 parts of yellow dye. To make a green dye, 2 parts of blue dye are mixed with 1 part of yellow dye. If equal amounts of green and orange are mixed, what is the proportion of yellow dye in the new mixture?

(a) $\frac{3}{16}$

(b) $\frac{1}{4}$

(c) $\frac{11}{30}$

(d) $\frac{3}{8}$

(e) $\frac{7}{12}$