

Corrigé de l'exercice 25 en utilisant le théorème de Thalès

$$* \frac{\overline{AB}g_1}{\overline{AC}g_1} = \frac{\overline{A'B'}g_2}{\overline{A'C'}g_2} \Leftrightarrow \frac{2-(-5)}{4-(-5)} = \frac{-1-3}{y-3} \Leftrightarrow \frac{7}{9} = \frac{-4}{y-3}$$

$$\Leftrightarrow y-3 = -4 \cdot \frac{9}{7} \Leftrightarrow y = 3 - \frac{36}{7} = \frac{-15}{7} = g_2(C')$$

$$* \frac{\overline{AB}g_1}{\overline{AD}g_1} = \frac{\overline{A'B'}g_2}{\overline{A'D'}g_2} \Leftrightarrow \frac{7}{z-(-5)} = \frac{-4}{7-3} \Leftrightarrow \frac{7}{z+5} = \frac{-4}{4}$$

$$\Leftrightarrow z+5 = -7 \Leftrightarrow z = -12 = g_1(D)$$

$$* \text{ si } x = g_1(C) = g_1'(C') :$$

$$\frac{\overline{AC}g_1}{\overline{AB}g_1} = \frac{\overline{A'C'}g_2}{\overline{A'B'}g_2} \Leftrightarrow \frac{x-(-5)}{7} = \frac{x-3}{-4} \Leftrightarrow (-4)(x+5) = 7(x-3)$$

$$\Leftrightarrow -4x-20 = 7x-21 \Leftrightarrow -11x = -1 \Leftrightarrow x = \frac{1}{11}$$