

Conditions

The time T necessary to make an enlargement of a photo negative varies directly as the area A of the enlargement. If 168 seconds are required to make a 3-by-7 enlargement, find the time required for a 5-by-10 enlargement.

Solution

$$7:3 = 168$$

$$10:5 = ?$$

$$\frac{7}{3}x = 168$$

$$x = 72$$

$$\frac{10}{5}x = 2x = 144$$

Answer: 144