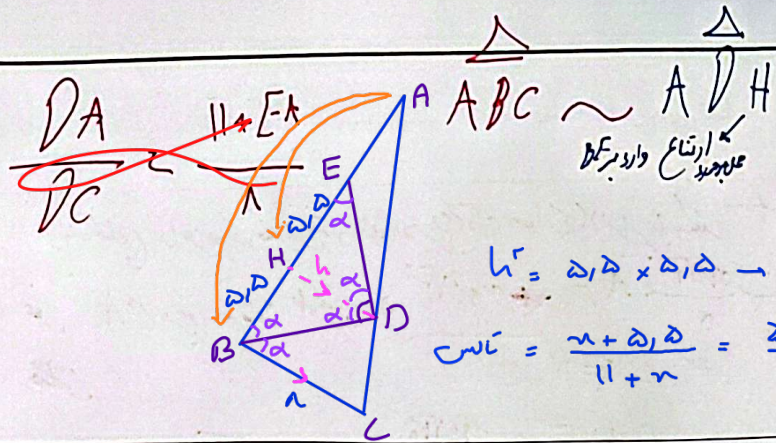
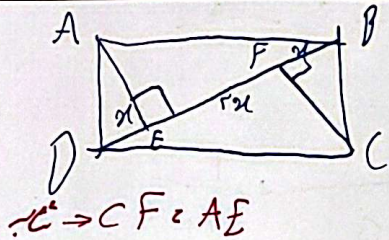




۰,۲۵

۶

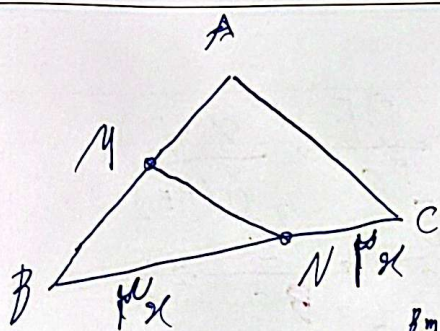
۹,۹



$$\frac{S_{ABCD}}{S_{FBC}} = \frac{FC \times r}{r \times FC} = 1$$

$$\frac{S_{FBC}}{S_{FCE}} = \frac{r \times FC}{FC \times r} = 1$$

۱
۲
۷

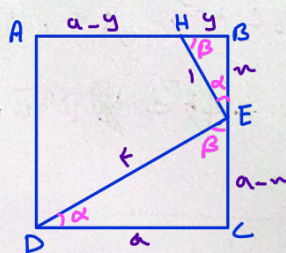
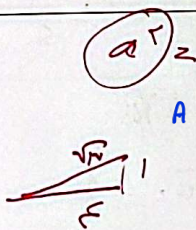


$$\frac{S_{BMN}}{S_{BAC}} = \left(\frac{BM}{BA}\right)^2 = \left(\frac{BN}{BC}\right)^2$$

$$\frac{BM \times BN}{BA \times BC} = \frac{1}{4} \rightarrow \frac{BM}{BA} = \frac{1}{2} \rightarrow \frac{BN}{BC} = \frac{1}{2}$$

۲

۸



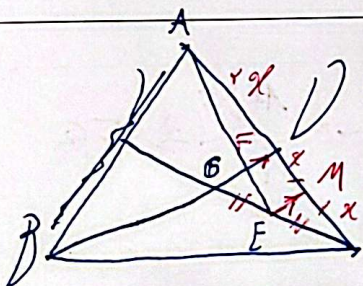
$$\frac{DE}{DC} = \frac{EH}{CE} = \frac{DH}{DE} = \frac{1}{2}$$

$$S_{\square} = a^2 = \frac{r^2}{25}$$

تقاطع مربع $a = \frac{r}{2}$

۵

۹



$$\frac{S_{ABC}}{S_{ADE}} = \left(\frac{AB}{AD}\right)^2 = \left(\frac{AC}{AE}\right)^2 = \left(\frac{BC}{DE}\right)^2$$

$$\frac{S_{ABC}}{S_{ADE}} = \frac{1}{9} \rightarrow \frac{AB}{AD} = \frac{1}{3} \rightarrow \frac{AC}{AE} = \frac{1}{3} \rightarrow \frac{BC}{DE} = \frac{1}{3}$$

۱۰
۲