

$AC = 5\sqrt{2}a \rightarrow y = \frac{5\sqrt{2}}{5}a$
 $BC \parallel AE \Rightarrow \triangle BFC \sim \triangle AFE$
 $\therefore \frac{FE}{BF} = \frac{AE}{BC} = \frac{AE}{FC} = \frac{1}{5}$
 $BE = \sqrt{9a^2 + a^2} = \sqrt{10}a$
 $EF = \frac{1}{5}BE = \frac{\sqrt{10}}{5}a \Rightarrow z = \frac{\sqrt{10}}{5}a$

$\frac{EF}{AF} = \frac{y}{y} = \frac{\frac{\sqrt{10}}{5}a}{\frac{5\sqrt{2}}{5}a} = \frac{\sqrt{10}}{5\sqrt{2}} = \frac{\sqrt{5}}{5}$
 $\Rightarrow \frac{\sqrt{5}}{5}$

$\frac{r}{a+1} = \frac{a}{10} \Rightarrow a = \boxed{5}$
 $\triangle ADE \sim \triangle ABC$

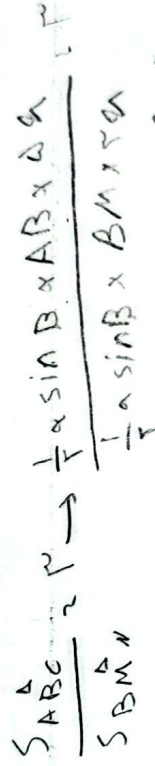
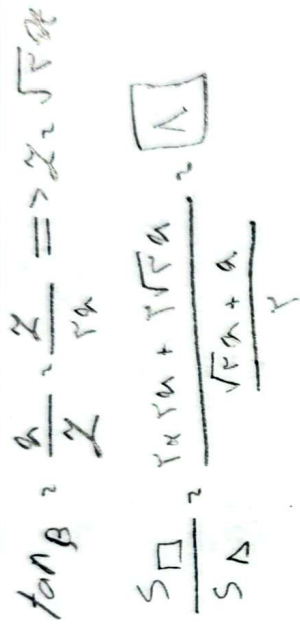
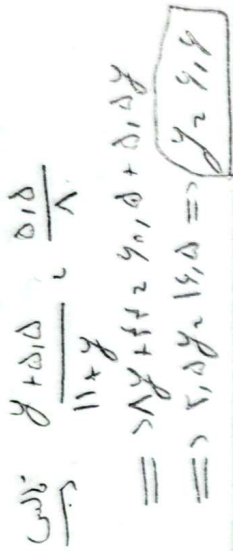
$\frac{r}{a+1} = \frac{a}{10} \Rightarrow 2a^2 + a - 5 = 0 \Rightarrow (2a+5)(a-1) = 0$
 $a = 1$ (فقط مثبت)

$a = 5k$
 $y = 2k$
 $\frac{5a}{5+a} = \frac{5k}{9k} = \frac{1}{5}$
 $a = \frac{5}{4} = 1.25$
 $BC = \boxed{9.125}$

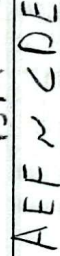
$BC = 19 \rightarrow BC = 2\sqrt{5}$
 $AB = 19 \rightarrow AB = 1\sqrt{5}$
 $\frac{AB}{BC} = \frac{1\sqrt{5}}{2\sqrt{5}} = \frac{1}{2}$

$\triangle BAF \sim \triangle ECF \rightarrow \frac{BF}{EF} = \frac{AF}{CF}$
 $\rightarrow \frac{y}{a} = \frac{1+a}{1} \rightarrow a(a+1) = 1$
 $\rightarrow a = 1 \rightarrow AF = 1+a = \boxed{2}$

$10a = \frac{a}{1} = \frac{y}{1+a} \Rightarrow 2a^2 + 11a - 10 = 0 \Rightarrow (2a+11)(a-1) = 0$
 $a = 1$ (فقط مثبت)
 $a = 1 \Rightarrow AF = 1+1 = \boxed{2}$



$$\Rightarrow \frac{AB}{BM} \cdot \frac{q}{p} \uparrow \quad \frac{AB}{BM} \cdot \frac{q}{p} \uparrow \quad \frac{AB}{BM} \cdot \frac{q}{p} \uparrow$$



$\frac{3}{7}$

$$\begin{aligned} \angle DE_2 \alpha_2 t &= \alpha_{20} / \Lambda \\ \rightarrow AD_2 t \alpha_2 \gamma &= S \square_2 (\gamma, \gamma)^2 = 10.14 \end{aligned}$$

