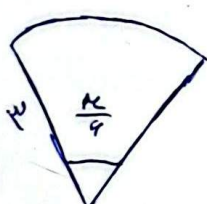
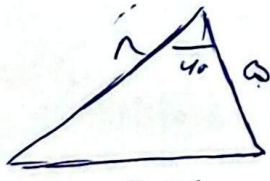
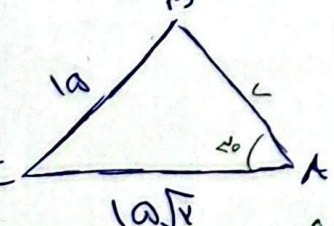


نام و نام خانوادگی پاسخنامه تشریحی تکلیف شماره ۱۹ کلاس دهم تجربی		
دالف  $(4 \times 360) + 17 + 4 = 103$ ✓	دب $a = 8.5 \times 0.2 - 3.0 \times 4 = 1.7 - 12 = 10.3$ $= 10.3$ $\Rightarrow \text{زاویه} = 360 - 10.3 = 349.7$ ✓	۱
الف  $(1 \times 360) + 11 + 17 = 11$ ✓	دب $a = 9.5 \times 18 - 3.0 \times 4 = 11$ ✓	۲
	الف $S = \frac{K}{4} \times \frac{1}{4} \times 9 = \frac{9K}{16}$ ✓	۳
 $u = v$	الف $S = \omega \times r \times \frac{K}{4} \times \frac{1}{4} = 10\sqrt{3}$ ✓	۴
	الف $B + C = 180 - \frac{10}{x} = \frac{10\sqrt{2}}{\sin B} = \frac{C}{\sin C} \Rightarrow C = \frac{10\sqrt{2}}{\sin B}$ $\Rightarrow \sin B = \frac{\sqrt{2}}{2}$ ✓ $B = 45^\circ$ ✓ $C = 135^\circ$ ✓ ب $B = 45^\circ$ ✓, $C = 135^\circ$ ✓ $B = \frac{K}{2}$ ✓, $C = \frac{1K}{12}$ ✓	۵

$$\frac{\tan(K-\alpha) + \sqrt{e} \tan(K+\alpha)}{\tan(K-\alpha) - \tan(K+\alpha)} = \frac{-\tan \alpha + \sqrt{e} \tan \alpha}{\tan \alpha - \tan \alpha} = \frac{\sqrt{e} \tan \alpha}{-\sqrt{e} \tan \alpha}$$

$$= -1 \Rightarrow \checkmark$$

8

Y

$$\frac{K}{V} = 10^\circ \Rightarrow \tan 10^\circ = a$$

$$\frac{\sqrt{e} \tan 10^\circ + \tan 10^\circ}{\sqrt{e} \tan 10^\circ - \tan 10^\circ} = \frac{\sqrt{e} \tan(\frac{K}{V} - 10^\circ) + \tan(\frac{K}{V} + 10^\circ)}{\sqrt{e} \tan(\frac{K}{V} - 10^\circ) - \tan(\frac{K}{V} + 10^\circ)}$$

$$\Rightarrow \frac{\sqrt{e} \cot 10^\circ + \cot 10^\circ}{-\sqrt{e} \tan 10^\circ - \cot 10^\circ} = \frac{1}{a} = \frac{1}{\frac{1}{\sqrt{e} a^2 - 1}} = \frac{1}{\sqrt{e} a^2 - 1} \Rightarrow \checkmark$$

Y

Y

$$\frac{\sin x + \cos x}{\sin x - \cos x} + \frac{\sin x - \cos x}{\sin x + \cos x} = e \Rightarrow \frac{(\sin x + \cos x)^2 + (\sin x - \cos x)^2}{\sin^2 x - \cos^2 x} = e$$

$$\Rightarrow \frac{e}{\sin^2 x - \cos^2 x} = e \Rightarrow \sin^2 x - \cos^2 x = \frac{e}{e}$$

$$\sin^2 x + \cos^2 x = 1$$

$$\sin^2 x = \frac{e}{e}$$

$$\cos^2 x = \frac{1}{e}$$

$$\Rightarrow \tan^2 x = e \Rightarrow \tan x = \sqrt{e}$$

1

Y

$$\frac{\sin^2 x - \sqrt{e} \cos^2 x + 1}{\sin^2 x + \sqrt{e} \cos^2 x + 1} = e \xrightarrow{\sin^2 x = 1 - \cos^2 x} \frac{1 - \cos^2 x - \sqrt{e} \cos^2 x + 1}{1 - \cos^2 x + \sqrt{e} \cos^2 x + 1} = e$$

$$\Rightarrow \frac{2 - \sqrt{e} \cos^2 x}{2 + \sqrt{e} \cos^2 x} = e \Rightarrow 2 \cos^2 x = \frac{2 - \sqrt{e} \cos^2 x}{e} \Rightarrow \cos^2 x = \frac{2}{e}$$

$$\sin^2 x = \frac{2}{e} \Rightarrow \tan^2 x = \frac{e}{2} \Rightarrow \tan x = \sqrt{\frac{e}{2}}$$

9

Y

$$\cos(4V/10) = \cos^2 \alpha = \frac{1 + \cos 2\alpha}{2} \Rightarrow \cos^2 4V/10 = \frac{1 + \frac{1}{\sqrt{e}}}{2}$$

$$\Rightarrow \cos^2 4V/10 = \frac{1 + \sqrt{e}}{2} = \frac{1 + \sqrt{e}}{2}$$

$$\cos 4V/10 = \frac{\sqrt{1 + \sqrt{e}}}{\sqrt{2}}$$

$$\sin(4V/10) = \sin^2 \alpha = \frac{1 - \cos 2\alpha}{2} \Rightarrow \sin^2 4V/10 = \frac{1 - \frac{1}{\sqrt{e}}}{2}$$

$$\Rightarrow \sin 4V/10 = \frac{\sqrt{1 - \sqrt{e}}}{\sqrt{2}}$$

$$\sin 4V/10 = \frac{\sqrt{1 - \sqrt{e}}}{\sqrt{2}}$$

10

10