

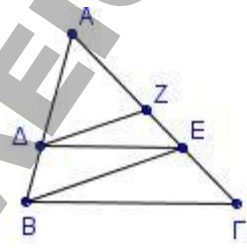
μ

2.18975. μ AB=9 ΑΓ=15. μ

) $\frac{ΑΔ}{ΑΒ} = \frac{2}{3}$ $\frac{ΑΕ}{ΕΓ} = 2$. μ 15
) μ μ . μ 10

2.19024. μ μ μ μ

) $\frac{ΑΕ}{ΑΔ} = \frac{ΑΓ}{ΑΒ}$ μ 10
) $\frac{ΑΕ}{ΑΓ} = \frac{ΑΖ}{ΑΕ}$ μ 5
) $\frac{ΑΖ}{ΑΔ} = \frac{ΑΕ}{ΑΒ}$ μ 10

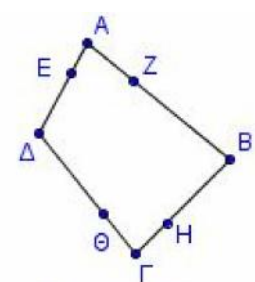


2.19026. μ μ μ

) $\frac{ΔΕ}{ΑΓ} = \frac{ΒΔ}{ΒΓ}$ μ 10
) $\frac{ΖΔ}{ΑΒ} = \frac{ΔΓ}{ΒΓ}$ μ 10
) $\frac{ΔΕ}{ΑΓ} + \frac{ΖΔ}{ΑΒ} = 1$ μ 5

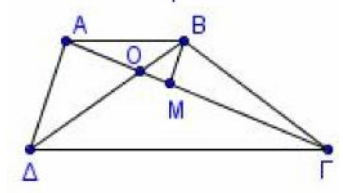
2.19033. μ μ μ μ

) $\frac{ΑΕ}{ΑΔ} = \frac{ΑΖ}{ΑΒ} = \frac{ΓΗ}{ΓΒ} = \frac{ΓΘ}{ΓΔ} = \frac{1}{3}$. μ 10
) $EZ = ΘH = \frac{1}{3}AB$ μ 10
) μ μ . μ 5



2.19036. (//) μ > μ

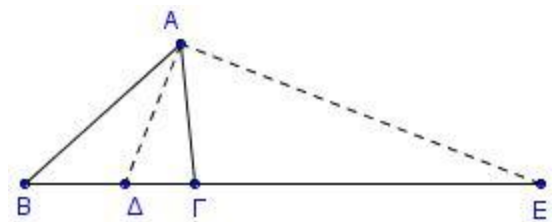
) = 27 μ 12, = 9 = 36, μ
) = 4 μ 13



μ

μ

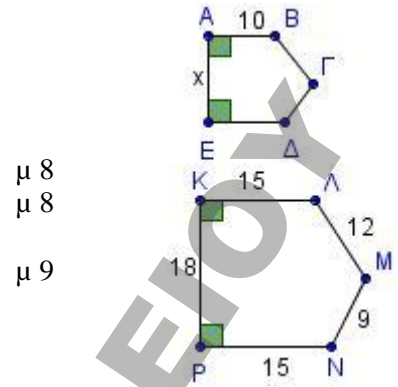
2.19040. (>) ,
 = 6, = 3, = 5
 = 15,
) = 4 μ 12
) = 12 μ 13



μ

2.19023.

μ ,
 $\hat{\Delta} = \hat{N}$ $\hat{B} = \hat{\Lambda}$.
) μ
) μ x
) μ



μ

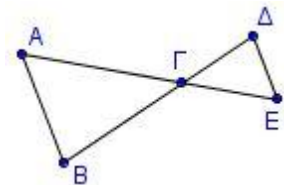
2.18984.

μ
)
 μ
 i. $AB = 8, AG = 12, \hat{A} = 35^\circ, \Delta E = 20, \Delta Z = 30, \hat{\Delta} = 35^\circ$.
 ii. $\hat{A} = 47^\circ, \hat{B} = 38^\circ, \hat{E} = 47^\circ, \hat{\Delta} = 95^\circ$.
 iii. $AB = AG, \hat{A} = \hat{\Delta}, \Delta E = \Delta Z$.

) μ μ , μ 15
 μ μ μ 10

2.18990.

μ μ μ μ μ
) // μ 12
) $B\Gamma = 2\Delta\Gamma$ $E\Gamma = \frac{1}{2}A\Gamma$ μ 13



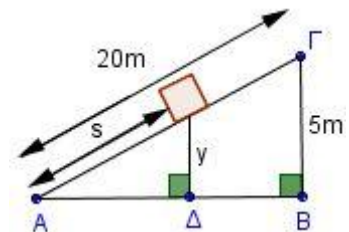
2.18993.)

i. $AG = 4, BG = 16, BA = 18, \Delta Z = 10, EZ = 40, \Delta E = 48$
 ii. $\hat{A} = 63^\circ, \hat{\Gamma} = 83^\circ, \hat{\Delta} = 63^\circ, \hat{E} = 34^\circ$

) μ $AB = 6, AG = 7, BG = 8.$ μ 15
 , μ μ μ 3;
 μ 10

2.18997.

μ .
) y,
 μ , $y = \frac{s}{4}$, s μ
 μ . μ 15
) $2m,$: μ 3
 i. μ s μ . μ 7
 ii. μ



υ

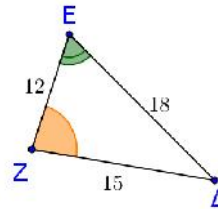
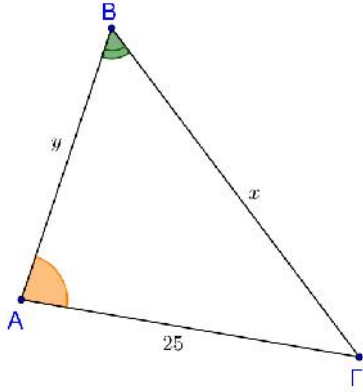
2.19011.

- i.
- ii.

) $ΑΓ \cdot ΒΔ = ΑΔ \cdot ΒΓ$

2.19014.

=18 =15.



$\hat{A} = \hat{Z}$, $\hat{B} = \hat{E}$ =25, =12,

)

)

: $\frac{ΒΑ}{...} = \frac{ΑΓ}{...} = \frac{ΓΒ}{...}$

)

x y.

2.19015.

=4, =5 =6.

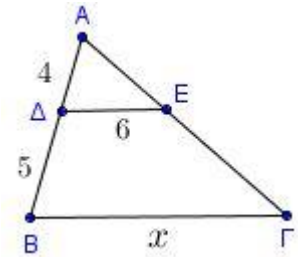
)

)

: $\frac{ΑΒ}{...} = \frac{...}{ΔΕ} = \frac{ΑΓ}{...}$

)

$\frac{4}{6} = \frac{5}{x}$



x.

$\frac{μ}{μ 7} = \frac{x}{μ 9}$

2.19017.

=21, =18.

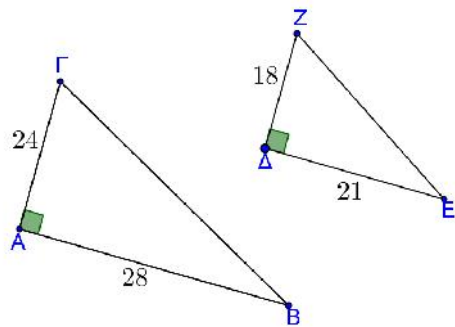
=28, =24

)

)

: $\frac{ΑΒ}{...} = \frac{...}{ΕΖ} = \frac{ΑΓ}{...}$

)



$\frac{μ 10}{μ 9}$

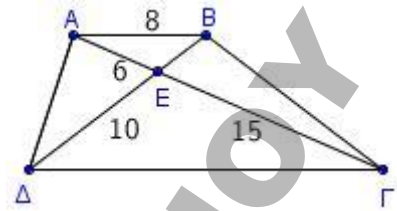
ΑΣΚΗΣΕΙΣ ΤΗΣ ΓΕΩΜΕΤΡΙΑΣ ΑΠΟ ΤΡΑΠΕΖΑ ΘΕΜΑΤΩΝ ΤΟΥ ΥΠΟΥΡΓΕΙΟΥ

υ

- i. $ZE = \frac{18}{21} \Gamma B$ ii. $ZE = \frac{24}{28} \Gamma B$ iii. $ZE = \frac{3}{4} \Gamma B$ iv. $ZE = \frac{4}{3} \Gamma B$ μ 6

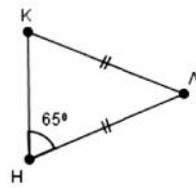
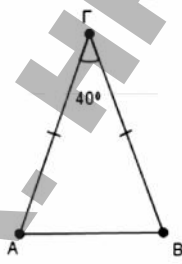
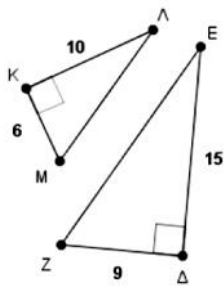
2.19019.

μ // , =6,
 =8, =15 =10.
)
)
 μ
 μ
) μ μ μ 8
 μ 9
 μ 8



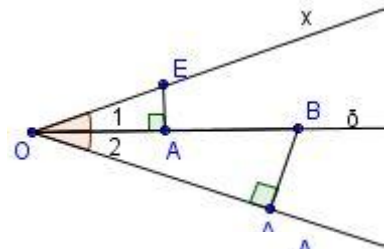
2.19021.

μ μ , μ :
)
) μ μ μ μ 14
 i. μ μ μ 6
 ii. μ μ μ 5
 1 : 2 :



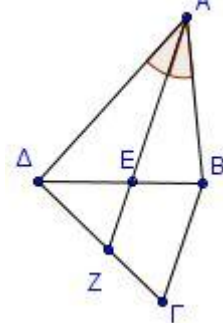
2.19030.

μ x y μ μ
 , , OB = 2OA.
 μ x μ
 y. :
) μ μ 10
) $2OA^2 = OA \cdot OE$. μ 15



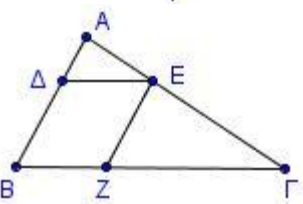
2.19031.

μ μ ,
 μ = 12, = 8, = 9 = 6,
) = 6 μ 13) = 9 μ 12



2.19035.

μ μ
) : μ
 μ μ 10



) $3 = \dots$

μ 15

4.18976.

)

i.

ii.

)

μ
, :
μ . μ 10
μ μ μ 10
μ μ μ
μ ; μ 5

4.18994 .

$BE = \frac{1}{3} AB$

μ
μ

) $= 2MN$

μ 13

) $MN = \frac{1}{5} AG$

μ 12

μ μ μ
μ μ , $\Delta Z = \frac{1}{3} \Delta \Gamma$.

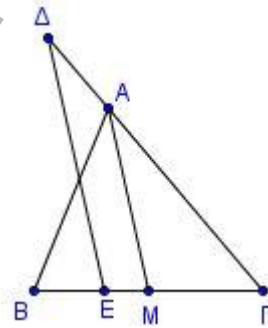
4.19000.

)

i. $\frac{\Delta E}{\dots} = \frac{\dots}{AB}$

ii. $\frac{EZ}{\dots} = \frac{\dots}{\Gamma M}$

μ 12



4.19016.

$AE = \frac{2}{3} AG$

$A\Delta = \frac{2}{3} AB$

)

$\angle A\hat{E}\Delta = \angle A\hat{\Gamma}B$

μ 9

)

$\frac{AE}{AG} = \frac{E\Delta}{B\Gamma}$

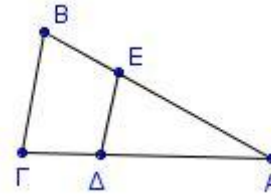
μ 8

)

μ μ

μ μ

μ 8



4.19013.

μ 0,75 μ

μ 1 2

μ 1,75 μ

1x2

μ

μ 1

μ 2

(μ : μ)

)

μ

μ

μ 12

υ

μ

2.19005.

$$\frac{B\Delta}{\Delta\Gamma} = \frac{3}{4}$$

) $AB = \frac{3}{4}A\Gamma$.

) $B\Gamma = \frac{5}{4}A\Gamma$,

μ 12

μ 13

2.19008)

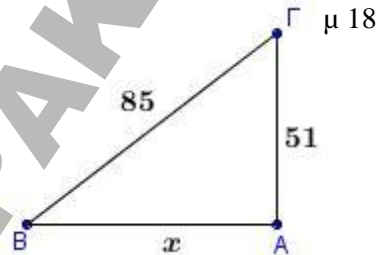
μ i. 3, 4, 5

μ ii. 3, 4, 5 (>0)

μ iii. 4, 5, 6

) μ x

4. μ 7



2.19041.

$$(\hat{A} = 90^\circ)$$

$$= 8, \quad = \frac{32}{5}$$

) μ 9

) μ 8

) μ 8

2.19043.

$$(\hat{A} = 90^\circ)$$

$$= 4, \quad = \frac{12}{5}$$

) μ

$$= \frac{9}{5}$$

μ 10

) μ

μ 10

) μ

μ 5

4.18985.

) μ

i. μ

ii. μ

$$AM \cdot AB = A\Gamma^2 \quad \mu 8$$

$$AM \cdot AB = A\Gamma^2; \quad \mu 9$$

$$AM \cdot AB = A\Gamma^2, \quad \mu 9$$

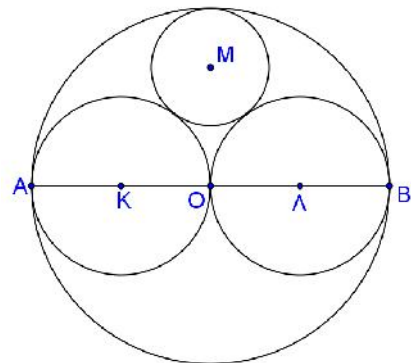
4.19006.

) μ

(O,R)

μ

μ

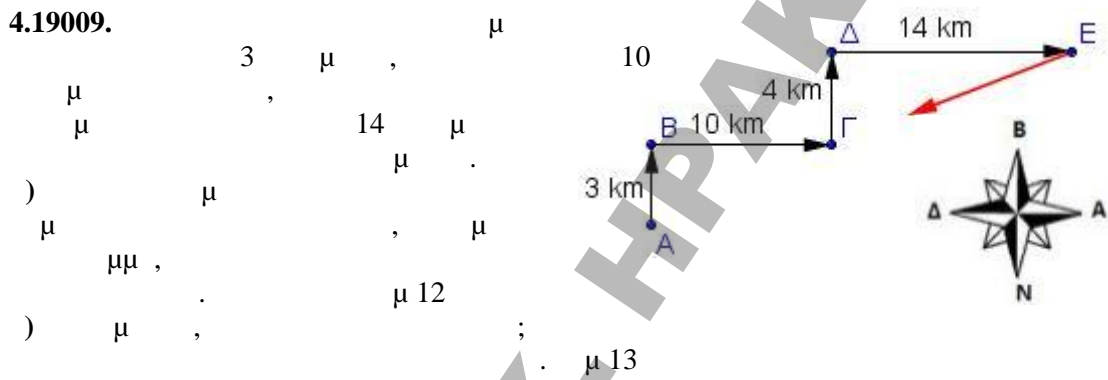


) μ

) $= \frac{R}{3}$. $\mu 12$
 $\mu 13$

2.19001. μ $=8, =6 =5$.
) μ . $\mu 11$
) $\mu 14$

2.19045. μ $=6, =9 \hat{B} = 60^\circ$
) $AG = 3\sqrt{7}$. $\mu 8$
) $\mu 8$
) $\mu 9$



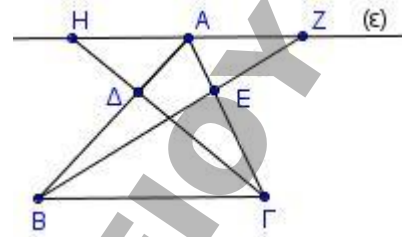
2.19042. μ $=7, =4 \mu = \sqrt{33}$.
) $=5$. $\mu 13$
) $\mu 12$

4.19025. μ μ , μ μ .
) $\Delta B^2 = 4MA \cdot M\Gamma$ $\mu 7$) $AB^2 + A\Delta^2 = 2AM \cdot A\Gamma$ $\mu 9$
) $AB^2 + B\Gamma^2 + \Gamma\Delta^2 + A\Delta^2 = 2A\Gamma^2$ $\mu 9$

4.19037. μ μ μ $= \frac{\sqrt{5}}{2}$.
) μ μ , μ : $\mu 8$
) μ μ . $\mu 9$
) μ μ = 2 $\mu 8$

4.19027.

- $\frac{A\Delta}{AB} = \frac{AE}{A\Gamma} = \frac{1}{3}$.
) $ZE = \frac{1}{2}EB$ μ 5
) $AZ = \frac{1}{2}B\Gamma$ μ 7
) $(BHZ) = 2(ABZ)$ μ 7
) μ 6

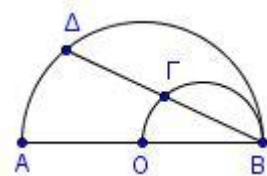


2.19028.

- $AB = 3, \Gamma\Delta = 7$ $B\Gamma = 4$:
) $BE = 2\sqrt{3}$ μ 13
) μ 12

2.19038.

-) μ 12
) μ 13
) $() = 4()$

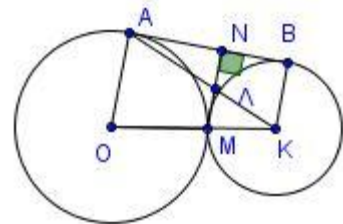


4.19022.

- $2^2 = 2^2 + 2^2$.
) $\mu = \frac{\sqrt{3}}{2}$ μ 8
) $= \frac{\sqrt{3}}{6}$ μ 6
) $() = 6()$ μ 9

4.19032.

-) $ML = \frac{1}{2}$ μ 8
) $AN = \frac{1}{2}$ μ 8
) $E_1 E_2$ μ



$$\frac{E_1}{E_2} = \left(\frac{(ΑΛΝ)}{(ΚΜΛ)} \right)^2 \quad \mu 9$$

4.19034.

μ , , ,

, $=\frac{1}{2}$, $=\frac{2}{3}$ $=\frac{1}{3}$.

) $(\quad) = \frac{1}{3}(\quad)$. μ 7

) $\frac{(\quad)}{(\quad)} = \frac{5}{18}$ μ 12

) μ $\frac{(\quad)}{(\quad)}$. μ 6

30 ΓΕΝ. ΛΥΚ. ΗΡΑΚΛΕΙΟΥ