

10

1. « », 3 « » 6
 4 « » 5 ,
 « » « », 7 ,
 « » « » .
 ?

$$6 \cdot 3 \cdot 4 + 5 \cdot 4 + 7 \cdot 6 = 134$$

: 134

7 -
 3 -
 1 -

2.

DE

$$DE = 8, \quad = 18.$$

:

D E

-

$DEMK$,

$$= DE = 8.$$

DK ,

AD .

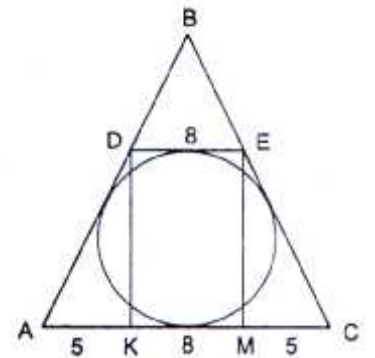
ADK

CEM .

$(DK = EM)$

$(\angle A = \angle C, \quad \Delta$

$)$.



$$AK = MC = 5.$$

$$AD + DE = DE + EM = 8 + 18 = 26$$

$$\Rightarrow AD = EM = \frac{26}{2} = 13.$$

$$DK = \sqrt{AD^2 - AK^2} = \sqrt{13^2 - 5^2} = 12,$$

$$\frac{1}{2} = 6.$$

: 6.

$$\begin{pmatrix} 7 & - & . \\ 4 & - & , \\ 1 & - & . \end{pmatrix}$$

3.

$$14. \quad 12,$$

(a, b, c, d)

a, b, c, d

$$\begin{cases} b = \frac{a+c}{2}, \\ c^2 = b, \\ b + c = 12, \\ a + d = 14. \\ a + b + c + d = 26. \end{cases}$$

$$\begin{aligned} 3b + d = 26 \quad d = 26 - 3b. \\ c = 12 - b. \end{aligned}$$

$$(12 - b)^2 = b(26 - 3b).$$

$$2b^2 - 25b + 72 = 0.$$

$$b_1 = 4,5; \quad b_2 = 8.$$

$$c_1 = 7,5; \quad c_2 = 4; \quad d_1 = 1,5; \quad d_2 = 12;$$

$$d_1 = 12,5; \quad d_2 = 2.$$

: (12; 8; 4; 2), (1,5; 4,5; 7,5; 12,5).

$$\begin{pmatrix} 7 & - & . \\ 5 & - & , \\ 3 & - & . \\ 1 & - & . \end{pmatrix}$$

4.

$$y = \frac{4x-1}{x^2-2x+2}$$

:

$$: D(y) = \mathbb{R}.$$

$$y = \frac{4x-1}{x^2-2x+2}$$

$$yx^2 - 2(y+2)x + 2y + 1 = 0. \tag{1}$$

$$= 0, \tag{1} \quad = 0,25.$$

$$\neq 0. \tag{1}$$

D

$$\frac{D}{4} = (y+2)^2 - y(2y+1) =$$

$$-y^2 + 3y + 4 \geq 0, \quad y^2 - 3y - 4 \leq 0 \Leftrightarrow -1 \leq y \leq 4.$$

$$\min = -1, \max = 4.$$

$$D = 0 = \frac{y+2}{y}.$$

$$= -1, = -1; = 4, = 1,5.$$

$$: \min () = (-1) = -1; \max () = (1,5) = 4.$$

7

-

5

-

3

-

2

-

5.

9

:

$$\overline{x} = 10 + -$$

$$\overline{x0y} = 100 + .$$

$$100 + = 9(10 +), \quad 5 = 4 ,$$

45,

$$= 5; = 4 -$$

$$405 = 9 \cdot 45.$$

: 45.

7

-

5

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1

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