

①

1	3 ⁸	5 ⁴
5 ⁴	3 ²⁰	1
10	3 ⁸	6 ²⁰

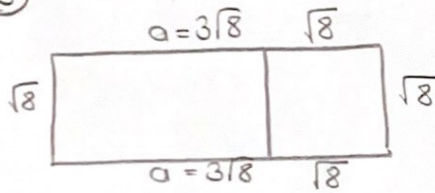
$$D \rightarrow 10^4$$

②

Nisan $0,081 \cdot 10^4$
 Mayıs $0,19 \cdot 10^3$
 Haziran $0,0025 \cdot 10^5$

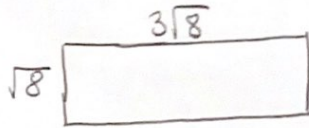
$$\begin{array}{r} \text{Nisan} \rightarrow 0,81 \cdot 10^3 \\ 0,19 \cdot 10^3 \\ + 0,25 \cdot 10^3 \\ \hline 1,25 \cdot 10^3 \end{array} \quad \boxed{A}$$

③



$$\sqrt{800} = 10\sqrt{8}$$

$$\begin{aligned} 2a + 4\sqrt{8} &= 10\sqrt{8} \\ 2a &= 6\sqrt{8} \rightarrow a = 3\sqrt{8} \end{aligned}$$



$$\text{Alan} = 3\sqrt{8} \cdot \sqrt{8} \rightarrow 3 \cdot 8 = 24 \quad \boxed{B}$$

④

$$\begin{aligned} 0 < 3x + 100 &< 310 \\ 0 < 3x &< 210 \\ 0 < x &< 70 \end{aligned} \quad \boxed{D}$$

⑤

Zeynep'in kalemleri

$$8 \text{ ve } 4 = 12 \text{ verdi}$$

$$12 + 4 + 8 = 16$$

$$16 - 12 = 4 \text{ kaldı}$$

$$45 + 4 = 49 \quad \boxed{C}$$

Kuzey'in kalemleri

$$27 \text{ ve } 9 = 36 \text{ verdi}$$

$$13 + 9 + 27 = 81$$

$$81 - 36 = 45 \text{ kaldı}$$

⑥

Ürün Bandı	Ürün Sayı	Toplam Süre (dk)
K	15	3
L	16	4
M	x	6

15 ürün	3 dk
5 ürün	1 dk
16 ürün	4 dk
4 ürün	1 dk
x ürün	6 dk
$\frac{x}{6}$ ürün	1 dk

$$5 + 4 + \frac{x}{6} < 13$$

$$9 + \frac{x}{6} < 13$$

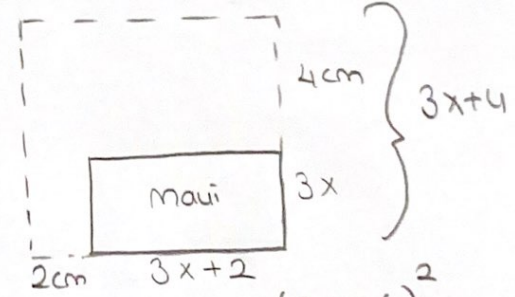
$$54 + x < 78$$

$$x < 24$$

$$\boxed{18} \quad \boxed{C}$$

6'ya bölünmeli

⑦



$$9x^2 + 24x + 16 \rightarrow (3x + 4)^2$$

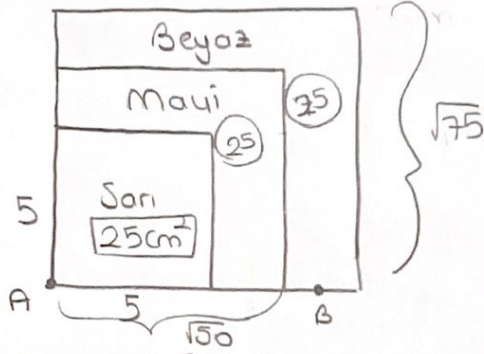
maui dikdörtgen çevre

$$2 \cdot (3x + 2 + 3x)$$

$$2 \cdot (6x + 2)$$

$$12x + 4 \quad \boxed{A}$$

8



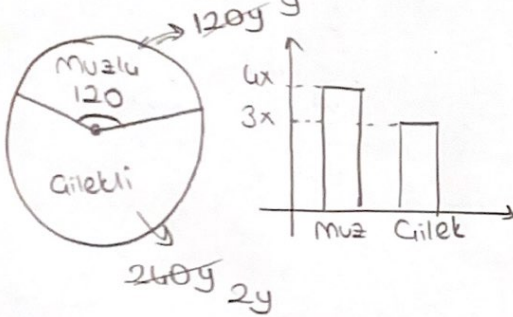
Sarı kenar 5 cm
Sarı bir kenar $\frac{20}{4} = 5$

Sarı alan $5^2 = 25$
Tüm alan $3 \cdot 25 = 75 \text{ m}^2$

$$\sqrt{50} < |AB| < \sqrt{75}$$

$$\sqrt{64} = 8 \quad \boxed{B}$$

9



y miktar muzlu sütte 4x muz aroması

1 miktar " " $\frac{4x}{y}$ aroma

2y miktar çilekli sütte 3x çilek aroması

1 miktar " " $\frac{3x}{2y}$ aroma

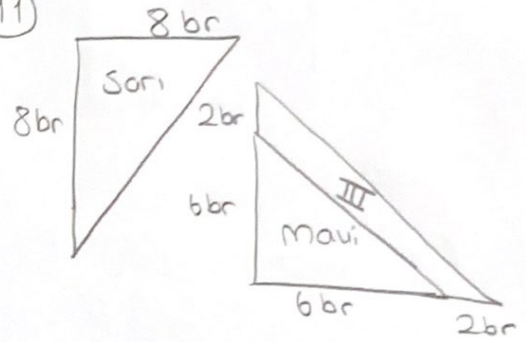
$$\frac{\text{muz}}{\text{çilek}} = \frac{\frac{4x}{y}}{\frac{3x}{2y}} = \frac{4x}{y} \cdot \frac{2y}{3x} = \frac{8}{3} \quad \boxed{D}$$

10

Öteline yansıma sorusu

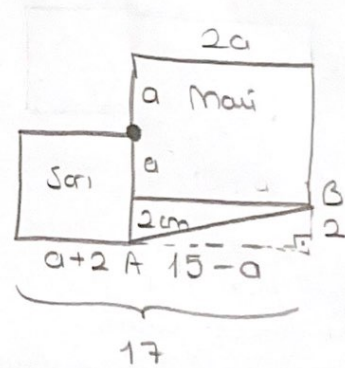
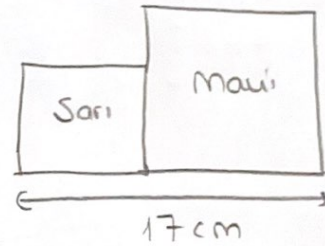
A

11



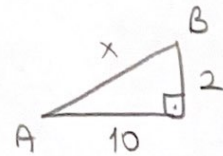
C

12



$$2a = 15 - a$$

$$3a = 15 \rightarrow a = 5$$



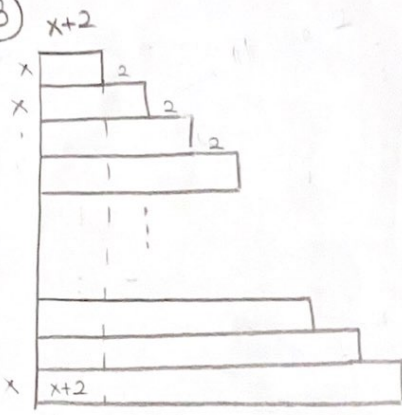
$$x^2 = 100 + 4$$

$$x^2 = 104$$

$$x = \sqrt{104}$$

$$x = \sqrt{4 \cdot 26} \Rightarrow x = 2\sqrt{26} \quad \boxed{B}$$

(13)



$$\begin{aligned}
 \text{Alan} &= x \cdot (x+2) + x \cdot (x+4) + \dots + x \cdot (x+24) \\
 &= x \cdot (12x + 156) \\
 &= 12x^2 + 156x \quad \boxed{D}
 \end{aligned}$$

(14)

18 Nisan 2013

(20) 24 Mayıs 2013

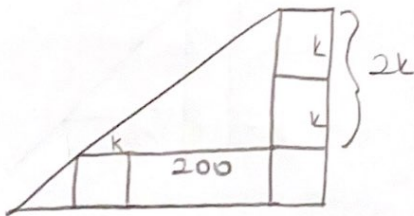
Nisan → 19, 20, 21, 22, 23, 24, 25,
26, 27, 28, 29, 30 → 12 gün

Mayıs → 1, 2, 3, 4, ... 23 → 23 gün

Toplam = 12 + 23 = 35 gün

Nisan olma olasılığı fazla
 $\frac{\text{Nisan}}{11} \quad \frac{\text{Mayıs}}{5} \quad \boxed{C}$

(15)



$$\begin{aligned}
 k + 200 &= 5k \\
 200 &= 4k
 \end{aligned}$$

$$k = 50$$

$$\frac{40}{100} = \frac{2k}{5k}$$

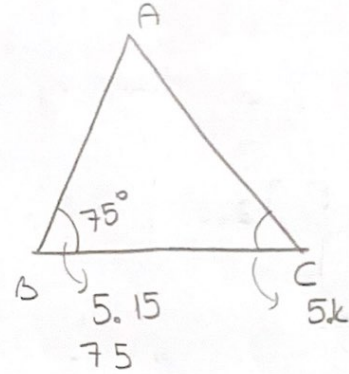
 $\boxed{B}$

(16)



Maui
12 eş parçaya
 $\frac{180}{12} = 15^\circ$

Sori
 $\frac{180}{x}$



$$|AC| > |BC| > |AB|$$

$$\hat{B} > \hat{A} > \hat{C}$$

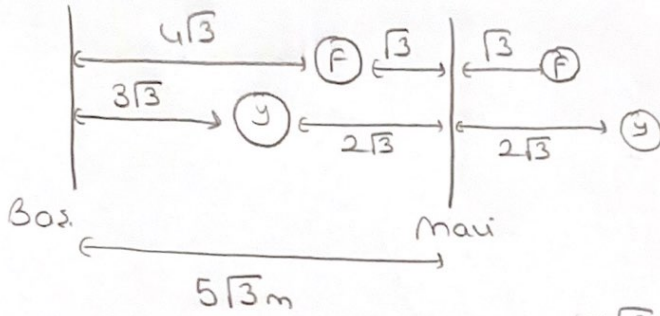
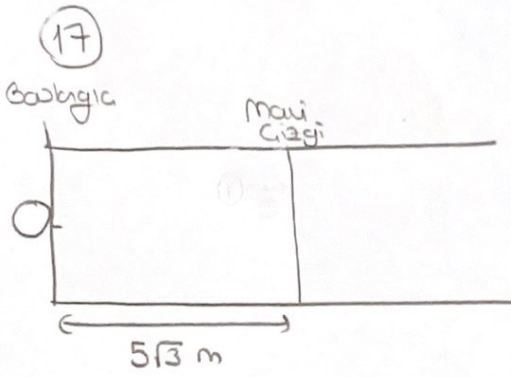
$$75^\circ$$

$$\hat{A} + \hat{C} = 105$$

5'in katı olan
enb 50 olabilir

$$A = 55^\circ$$

 $\boxed{C}$



$$\begin{aligned} 3\sqrt{3} < m < 4\sqrt{3} & \quad 6\sqrt{3} < m < 7\sqrt{3} \\ \sqrt{27} < m < \sqrt{48} & \quad \sqrt{108} < m < \sqrt{147} \end{aligned}$$

12 D

18

Ürün	Hacim (Lt)	Fiyat (kuruş)
Cam Şişe	0,5	50
Kağıt Kutu	1	20

x tane cam şişe $\rightarrow 0,5x$ Lt
 x tane kağıt kutu $\rightarrow 1x$ Lt

$$0,5x + 1x = 150$$

$$1,5x = 150$$

$$x = 100 \text{ tane cam şişe ve kağıt kutu}$$

$$100 \cdot 50 + 100 \cdot 20 = 5000 + 2000 = 7000 \text{ kuruş}$$

70 TL

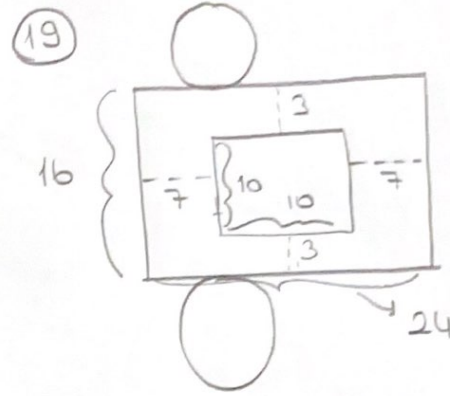
$$74 - 70 = 4 \text{ TL} \rightarrow 400 \text{ kuruş}$$

$$\frac{400}{20} = 20 \text{ tane 1 L}$$

$$20 \cdot 1 = 20 \text{ Lt eksikmiş}$$

$$\frac{20}{0,5} = 40 \text{ tane cam şişe}$$

A



$$2\pi r = 24$$

$$2 \cdot 3 \cdot r = 24$$

$$r = 4$$

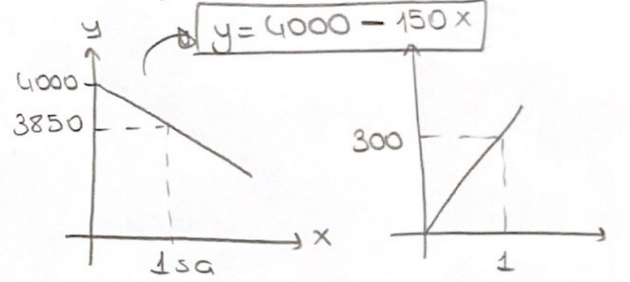
$$\text{Hacim} = \pi r^2 \cdot h = 3 \cdot 4^2 \cdot 16 = 768 \text{ cm}^3$$

C

Hacmi

20 4000 Lt olan su deposu

K	L	N	P	R	S
900	1200	700	800	1500	1000



1 sa 150 Lt su gitti

1 saatte 300 m² alan sulandı

1 sa 150 Lt su ile 300 m² alan sulandı.

Toplam 2500 Lt olduğunda

$$2500 = 4000 - 150x$$

$$1500 = 150x \rightarrow x = 10 \text{ saat geçerli}$$

1 saatte 300 m² sulandı
 10 saatte 3000 m² sulandı

K L N P

$$900 + 1200 + 700 + 800 = 3600$$

B P'de olur