

$$1. \quad a - \frac{b}{c} = 6 + \frac{4}{10} = 6 + 1 - \frac{6}{10} = 7 - \frac{3}{5}$$

$$7 + 3 + 5 = 15$$

Cevap: A

$$2. \quad 9^{3-x} = 27$$

$$(3^2)^{3-x} = 3^3$$

$$3^{6-2x} = 3^3$$

$$6 - 2x = 3$$

$$6 - 3 = 2x$$

$$3 = 2x$$

$$\frac{3}{2} = x$$

Cevap: B

$$3. \quad \left[\sqrt{3} + \frac{b}{\sqrt{3}} \right] \cdot \frac{1}{(\sqrt{3})^3}$$

$$\frac{\sqrt{3} \cdot \sqrt{3} + b}{\sqrt{3}} \cdot \frac{1}{3\sqrt{3}} = \frac{3+b}{3.3} = \frac{9}{9} = 1$$

Cevap: A

$$4. \quad \frac{10! - 9!}{8! + 7!} = \frac{10.9! - 9!}{8.7! + 7!} = \frac{9!(10-1)}{7!(8+1)}$$

$$\frac{9! - 9!}{7! + 9!} = \frac{9.8.7!}{7!} = 9.8 = 72$$

Cevap: A

$$5. \quad AB6 - AB = 66B$$

$$100A + 10B + 6 - 10A - B = 660 + B$$

$$90A + 8B = 654$$

$$\begin{array}{r} \downarrow \quad \downarrow \\ 7 \quad 3 \end{array}$$

$$7 + 3 = 10$$

Cevap: D

$$6. \quad \begin{array}{l} \text{Şubat} \rightarrow 70 + 40 = 110 \\ \text{Mart} \rightarrow 110 + 50 = 160 \\ \text{Nisan} \rightarrow 160 + 60 = 220 \\ \text{Mayıs} \rightarrow 220 - 20 = 200 \\ \text{Haziran} \rightarrow 200 - 40 = 160 \end{array}$$

$$\text{Ortalama} = \frac{110 + 160 + 220 + 200 + 160}{5}$$

$$= \frac{850}{5} = 170$$

Cevap: D

$$7. \quad \begin{array}{l} a \cdot b^2 < 0 \rightarrow a - \\ a \cdot b \cdot d > 0 \rightarrow b \cdot d < 0 \\ b \cdot c \cdot d < 0 \rightarrow b \cdot d < 0 \text{ ise } c + \end{array}$$

E) A şehri C şehirden soğuktur
ifadesi her zaman doğru çünkü;
A → - C → +

Cevap: E

8. $a < b < c \rightarrow$ ardışık doğal sayılar

I. b çift ise $b = 2$ diyelim.

$a = 1$ $c = 3$ olur. $a \cdot c = 1 \cdot 3 = 3$ tektir. ✗

II. b tek ise $b = 3$ diyelim.

$a = 2$ $c = 4$ olur. $\frac{a \cdot c}{4} = \frac{2 \cdot 4}{4} = 2$ çift ✓

III. $a + b + c =$ Tek ise

Çift tek çift olmalı. b tektir doğru. ✓

Cevap: D

9. $T(AB) = AB - A.B$

$T(AB) - T(BA) = 63$

$(AB - A.B) - (BA - B.A) = 63$

$AB - BA = 63$

$9(A - B) = 63$

$A - B = 7$

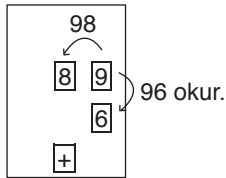
9 2

8 1

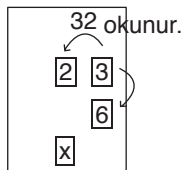
$$\begin{array}{r} 92 \\ + 81 \\ \hline 173 \end{array}$$

Cevap: B

10.



$$98 + 96 = 194$$



$$32 \times AB = 1152$$

$$AB = 36$$

Cevap: B

$$11. \underbrace{(a-b)}_1 \underbrace{(a^2+b^2)}_c = c$$

$$\underbrace{a-b}_3 \underbrace{= 1}_2 \text{ ise}$$

$$\underbrace{a^2+b^2}_9 \underbrace{= c}_4 \text{ ise}$$

$$9 + 4 = 13$$

$$a = 3 \quad b = 2 \quad c = 13$$

$$a \cdot b \cdot c = 78$$

Cevap: E

$$12. \frac{a+3b+\frac{2b^2}{a}}{a-\frac{4b^2}{a}} \cdot \left(1-\frac{3b}{a+b}\right)$$

$$= \frac{a^2+3ab+2b^2}{a^2-4b^2} \cdot \left(\frac{a+b-3b}{a+b}\right)$$

$$= \frac{(a+2b)(a+b)}{(a-2b)(a+2b)} \cdot \frac{a-2b}{a+b} = 1$$

Cevap: C

13. Sınıf = 40 Erkek = x

Kadın = 40-x

Aritmetik Ort. = 18

Toplam = 18 . x

$$\frac{18x+3 \cdot 30}{x+3} = 20$$

$$18x + 90 = 20x + 60$$

$$30 = 2x$$

$$15 = x$$

$$40 - 15 = 25$$

Cevap: C

14. $\left. \begin{array}{l} a-b = 12 \\ b+c = -3 \end{array} \right\} \Rightarrow \boxed{a+c = 11}$

$$a^2 + a.c = 99 \rightarrow a(a+c) = 99$$
$$a.9 = 99$$
$$a = 11$$
$$\begin{array}{l} a-b = 12 \\ 11-b = 12 \end{array} \quad \begin{array}{l} b+c = -3 \\ -1+c = -3 \end{array}$$
$$\begin{array}{l} b = -1 \\ c = -2 \end{array}$$
$$a + b \cdot c = 11 + (-1)(-2) = 13$$

Cevap: A

15. $\begin{array}{r} a+9 \overline{) 5} \\ \underline{n+2} \\ n^3-13 \end{array}$ $\begin{array}{l} n+2 = 5 \\ n^3 - 13 = 14 \end{array}$

$$n^3 - 13 < 15$$
$$n^3 < 28$$
$$n_{\max} = 3$$

Cevap: B