1. $$\frac{5-\frac{1}{6}+\frac{1}{6}+5}{7+\frac{16}{7}-7-\frac{11}{7}}=\frac{10}{\frac{5}{7}}=\cancel{10}^{2}.\frac{7}{\cancel{5}}$$

$$=14$$

Cevap: E

2. $$\frac{3-9}{\frac{1}{3}}=\frac{12}{\frac{1}{3}}=12.3=36$$

Cevap: E

3.
$$\begin{array}{r}\sqrt{x}-\sqrt{y}=3\\ +\ \sqrt{x}+\sqrt{y}=9\\ \hline 2\sqrt{x}=12\\ \sqrt{x}=6\\ x=36\end{array}$$

$$\begin{array}{r}\sqrt{x}-\sqrt{y}=3\\ \sqrt{36}-\sqrt{y}=3\\ 6-\sqrt{y}=3\\ \sqrt{y}=3\\ y=9\end{array}$$

$x+y=36+9=45$

Cevap: A

4. $$\boxed{2m.3+1}+\boxed{\frac{37-1}{2}}=9.3+4+\frac{37-1}{2}$$

$$\boxed{6m+1}+\boxed{2m}=28+18$$

$$\frac{6m+1}{2}+2m.3+1=46$$

$$3m+6m+1=46$$

$$9m=45\rightarrow m=5$$

Cevap: E

5. $$\frac{2x-y}{x-3}\times 4$$

$$2x-y=4x-12$$

$$\boxed{2x+y=12}$$

$$\frac{3y-x}{y+2}\times\frac{1}{4}$$

$$12y-4x=y+2$$

$$\boxed{11y-4x=2}$$

$$\begin{array}{r}2x+y=12\ /\ 2\\ +\ 11y-4x=2\\ \hline 13y=26\end{array}$$

$$\boxed{y=2}$$

$2x+y=12 \rightarrow x.y=5.2$

$2x+2=12 \rightarrow =10$

$$\boxed{x=5}$$

Cevap: D

6.
$$\begin{array}{r}2<x<5\\ +\ -3<y<-1\\ \hline -1<x+y<4\\ 0,\ 1,\ 2,\ 3\end{array}$$

$$\begin{array}{r}2<x<5\\ +\ 1<y<3\\ \hline 3<x+y<8\\ 4,\ 5,\ 6,\ 7\end{array}$$

8 tane

Cevap: D

Diğer Sayfaya Geçiniz.

7. $a^3 - b^3$ farkı tek ise

a : tek veya a : çift

b : çift b : tek

I. ab – 2

T.Ç – 2 → çift

Ç.T – 2 → çift

İki durum için de doğru.

II. a – b

T – Ç → tek

Ç – T → tek

İki durum için de doğru.

III. 3a – 4b

3.T – 4.Ç → tek

3.Ç – 4.T → çift

İki durumu da sağlamaz. Yanlış

I ve II doğru

Cevap: C

8. max : 908

min : 182

908 + 182 = 1090

Cevap: D

9. $9.8.7! + 8.7! + 7! = 2^a . 3^b . c$

$7!\,(9.8 + 8 + 1) = 2^a . 3^b . c$

$7!\,.81 = 2^a . 3^b . c$

$7.6.5.4.3.2.1.3^4 = 2^a . 3^b . c$

$7.\,5\,.\,3^6 . 2^4 = 2^a . 3^b . c$

a = 4 b = 6 c = 35

a + b + c = 4 + 6 + 35 = 45

Cevap: A

10.
$$\frac{\frac{1}{a^4}+b^2}{a^4+\frac{1}{b^2}} \cdot \frac{a^2+\frac{1}{b^2}}{\frac{1}{a^2}+b^2}$$

$$= \frac{\frac{1+a^4b^2}{a^4}}{\frac{a^4b^2+1}{b^2}} \cdot \frac{\frac{a^2b^2+1}{b^2}}{\frac{1+a^2+b^2}{a^2}}$$

$$= \frac{\cancel{1+a^4b^2}}{a^4} \cdot \frac{\cancel{b^2}}{\cancel{a^4b^2+1}} \cdot \frac{\cancel{a^2b^2+1}}{\cancel{b^2}} \cdot \frac{a^2}{\cancel{1+a^2b^2}}$$

$$= \frac{1}{a^2}$$

Cevap: E

11. $2ab = c$

$8bc = a$

$$\frac{a}{4c} \times \frac{c}{a}$$

$a^2 = 4c^2 \rightarrow \boxed{a = 2c}$

$2ab = c$

$\times \quad 8bc = a$

$16ab^2c^2 = ac$

$b^2 = \frac{1}{16} \rightarrow \boxed{b = \frac{1}{4}}$

$a + 4b + c = 3$

$2c + 4.\frac{1}{4} + c = 3$

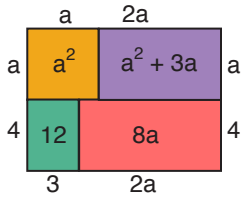
$3c = 2 \rightarrow \boxed{c = \frac{2}{3}}$

$a = 2c \rightarrow a = 2.\frac{2}{3} \rightarrow \boxed{a = \frac{4}{3}}$

Cevap: C

Diğer Sayfaya Geçiniz.

12.



$a^2 + a^2 + 3a + 12 + 8a = 88$

$2a^2 + 11a + 12 = 88$

$2a^2 + 11a - 76 = 0$

$a = 4$

Karenin çevresi = 4a

$= 4.4$

$= 16$

Cevap: D

13. 1.kat → 3 kart

2.kat → 6 kart

3.kat → 9 kart

⋮

6.kat → 18 kart

$+$

$3 + 6 + ... + 18$

$= 3(1 + 2 + ... + 6)$

$= 3.\frac{6.7}{2}$

= 63 kart vardır.

Cevap: E

14. $\sqrt{3}.a = \sqrt{17} - \sqrt{2}$

x $\sqrt{5}.b = \sqrt{17} + \sqrt{2}$

$\sqrt{15}ab = 17 - 2$

$\sqrt{15}ab = 15 \rightarrow ab = \sqrt{15}$

Cevap: C

15. (35), (36), 37, (38), (39), 40

$35 + 36 + 38 + 39 = 148$

Cevap: E

Diğer Sayfaya Geçiniz.