

$$1. \quad \frac{3 - \frac{1}{2} + \frac{1}{2} + 3}{\cancel{5} + \frac{6}{5} - \cancel{5} - \frac{1}{5}} = \frac{3+3}{\frac{6-1}{5}} = \frac{6}{\frac{5}{5}} = \frac{6}{1} = 6$$

Cevap: D

$$2. \quad \frac{1}{3} + \frac{2}{5} \cdot \frac{4}{3} - \frac{2}{5}$$

$$\frac{1}{3} + \frac{2}{5} \cdot \frac{3}{2} - \frac{2}{5}$$

$$\frac{1}{3} + \frac{3}{10} - \frac{2}{5} = \frac{10+9-12}{30} = \frac{7}{30}$$

Cevap: C

$$3. \quad \frac{\frac{1}{3} + \frac{1}{2}}{1 - \frac{2}{3}} : \frac{2}{1} + \frac{1}{4}$$

$$\frac{\frac{2+3}{6}}{\frac{3-2}{3}} \cdot \frac{1}{2} + \frac{1}{4} = \frac{5}{2} \cdot \frac{3}{1} \cdot \frac{1}{2} + \frac{1}{4}$$

$$= \frac{5}{4} + \frac{1}{4} = \frac{6}{4} = \frac{3}{2}$$

Cevap: E

$$4. \quad \frac{2 + \frac{1}{2}}{3 : \frac{3}{2}} + \frac{5 \cdot 3}{2 \cdot 2}$$

$$\frac{\frac{5}{2}}{\cancel{3} \cdot \frac{2}{3}} + \frac{5 \cdot \cancel{2}}{\cancel{2} \cdot 3} = \frac{5}{2} \cdot \frac{1}{2} + \frac{5}{3}$$

$$= \frac{5}{4} + \frac{5}{3}$$

$$= \frac{35}{12}$$

Cevap: A

$$5. \quad \frac{1}{2} - \frac{2}{3} \left(1 + \frac{1}{2} \cdot \frac{3}{2} - \frac{6}{2} \right)$$

$$\frac{1}{2} - \frac{2}{3} \left(1 + \frac{1}{2} \cdot \frac{2}{3} - 3 \right)$$

$$\frac{1}{2} - \frac{2}{3} \left(1 + \frac{1}{3} - 3 \right)$$

$$\frac{1}{2} - \frac{2}{3} \left(-2 + \frac{1}{3} \right)$$

$$\frac{1}{2} - \frac{2}{3} \cdot \frac{-5}{3} = \frac{1}{2} + \frac{10}{9} = \frac{29}{18}$$

Cevap: B

TASARI EĞİTİM YAYINLARI

$$6. \quad 1 + \frac{1}{1 + \frac{1}{4}} : \left(1 + \frac{1}{1 - \frac{1}{4}} \right)$$

$$1 + \frac{1}{\frac{5}{4}} : \left(1 + \frac{1}{\frac{3}{4}} \right)$$

$$1 + \frac{4}{5} : \left(1 + \frac{4}{3} \right)$$

$$1 + \frac{4}{5} : \frac{7}{3} = 1 + \frac{4}{5} \cdot \frac{3}{7} = 1 + \frac{12}{35} = \frac{47}{35}$$

Cevap: C

$$7. \quad \frac{2 - \frac{1}{3} \cdot \left(3 - \frac{2}{3} \right)}{\frac{7}{3} - 2} = \frac{2 - \frac{1}{3} \cdot \frac{7}{3}}{\frac{1}{3}}$$

$$= \frac{2 - \frac{1}{3} \cdot \frac{7}{3}}{\frac{1}{3}} = \frac{2 - \frac{1}{7}}{\frac{1}{3}} = \frac{13}{7}$$

$$= \frac{13}{7} \cdot \frac{3}{1} = \frac{39}{7}$$

Cevap: A

$$8. \left(1 - \frac{1}{1 - \frac{1}{2}}\right)^2 = \left(1 - \frac{1}{\frac{1}{2}}\right)^2 = (1 - 2)^2 = (-1)^2 = 1$$

Cevap: C

$$9. \left[\frac{1}{2} \cdot \frac{1}{3} - \frac{5}{3} \cdot \frac{1}{4}\right] : 2^{-2} = \left[\frac{1}{6} - \frac{5}{12}\right] : \frac{1}{4} = -\frac{3}{12} \cdot \frac{1}{4} = -\frac{3}{12} \cdot 4 = -\frac{12}{12} = -1$$

Cevap: B

$$10. 3 - \frac{2 - \frac{1}{1 - \frac{1}{3}}}{1 - \frac{11}{9}} = 3 - \frac{2 - \frac{1}{\frac{2}{3}}}{-\frac{2}{9}} = 3 - \frac{2 - \frac{3}{2}}{-\frac{2}{9}} = 3 - \frac{\frac{1}{2}}{-\frac{2}{9}} = 3 - \frac{1}{2} \cdot \frac{-9}{2} = 3 + \frac{9}{4} = \frac{21}{4}$$

Cevap: E

$$11. \left[\frac{\frac{2}{3}}{5} - \frac{2}{\frac{3}{5}}\right] : \frac{16}{5} = \left[\frac{2}{3} \cdot \frac{1}{5} - 2 \cdot \frac{5}{3}\right] \cdot \frac{5}{16} = \left[\frac{2}{15} - \frac{10}{3}\right] \cdot \frac{5}{16} = \frac{-48}{15} \cdot \frac{5}{16} = \frac{-48}{48} = -1$$

Cevap: B

$$12. \frac{1}{2} + 2 \cdot \left[\frac{1}{6} - \left(\frac{2}{3} - \frac{1}{4}\right)\right]$$

$$\frac{1}{2} + 2 \cdot \left[\frac{2-8+3}{12}\right]$$

$$\frac{1}{2} + 2 \cdot \frac{-3}{12} = \frac{1}{2} - \frac{6}{12} = \frac{1}{2} - \frac{1}{2} = 0$$

Cevap: B

$$13. 1 + \frac{1 - \frac{1}{2}}{\frac{1}{2}} = 1 + \frac{1 + \frac{1}{2}}{\frac{1}{2}} = 1 + \frac{1+1}{\frac{1}{2}} = 1 + 2 \cdot \frac{2}{1} = 1 + 4 = 5$$

Cevap: B

$$14. 1 - \frac{3}{1 - \frac{1}{1 + \frac{1}{a}}} = 1 - \frac{3}{1 - \frac{1}{\frac{a+1}{a}}} = 1 - \frac{3}{1 - \frac{a}{a+1}} = 1 - \frac{3}{\frac{a+1-a}{a+1}} = 1 - \frac{3}{\frac{1}{a+1}} = 1 - 3(a+1) = 1 - 3a - 3 = -3a - 2$$

Cevap: D

$$15. \frac{\left(-\frac{1}{2}\right)^{-1} - \frac{1}{2}}{-\frac{1}{2} + 2} = \frac{-2 - \frac{1}{2}}{\frac{3}{2}} = \frac{-5}{\frac{3}{2}} = \frac{-5}{2} \cdot \frac{2}{3} = -\frac{5}{3}$$

Cevap: E

$$1. \frac{0,25}{0,05} + \frac{0,100}{0,002} - \frac{0,05}{0,01}$$

$$\frac{25}{5} + \frac{100}{2} - \frac{5}{1} = 5 + 50 - 5 = 50$$

Cevap: B

$$2. \frac{2 - 0,4}{3 + 0,2} + \frac{0,16}{0,40}$$

$$\frac{1,6}{3,2} + \frac{16}{40} = \frac{16}{32} + \frac{16}{40}$$

$$= \frac{1}{2} + \frac{2}{5} = \frac{9}{10} = 0,9$$

Cevap: E

$$3. \frac{0,4 - (0,24 - 0,34)}{0,05} = \frac{0,4 - (-0,1)}{0,05}$$

$$= \frac{0,4 + 0,1}{0,05}$$

$$= \frac{0,5}{0,05}$$

$$= \frac{50}{5} = 10$$

Cevap: D

$$4. \left(2 - 0,3 \cdot \frac{3}{2} + 3\right) \cdot \frac{5}{3}$$

$$\left(2 - \frac{3}{10} \cdot \frac{2}{3} + 3\right) \cdot \frac{5}{3}$$

$$\left(5 - \frac{1}{5}\right) \cdot \frac{5}{3}$$

$$\frac{24}{3} \cdot \frac{5}{3} = \frac{24}{3} = 8$$

Cevap: D

$$5. \left[\left(\frac{1}{5} - 0,4 + 0,6\right)\right] : 0,2$$

$$\left[\frac{1}{5} + 0,2\right] : \frac{2}{10}$$

$$\left(\frac{1}{5} + \frac{2}{10}\right) \cdot \frac{10}{2} = \frac{4}{10} \cdot \frac{10}{2} = 2$$

Cevap: C

$$6. \frac{3}{20} \cdot \left(\frac{1}{5} - \frac{0,3 + \frac{1}{5}}{2}\right)$$

$$= \frac{3}{20} \cdot \left(\frac{1}{5} - \frac{\frac{3}{10} + \frac{2}{10}}{2}\right)$$

$$= \frac{3}{20} \cdot \left(\frac{1}{5} - \frac{5}{10} \cdot \frac{1}{2}\right)$$

$$= \frac{3}{20} \cdot \left(\frac{1}{5} - \frac{5}{20}\right)$$

$$= \frac{3}{20} \cdot \frac{-1}{20}$$

$$= \frac{3}{20} \cdot \frac{20}{-1} = -3$$

Cevap: A

$$7. \frac{m,0m}{0,0m} + \frac{0,mm}{0,0m} + \frac{m}{0,m}$$

$$\frac{m0m}{m} + \frac{mm}{m} + \frac{m0}{m}$$

$$101 + 11 + 10 = 122$$

Cevap: D

$$8. \quad 0,2: \left[\frac{7}{15} + \frac{9}{20} - 1 \frac{1}{12} \right]$$

$$\frac{2}{10} : \left[\frac{7}{15} + \frac{9}{20} - \frac{13}{12} \right]$$

(4) (3) (5)

$$\frac{2}{10} : \frac{28+27-65}{60}$$

$$\frac{2}{10} : \frac{-10}{60} = \frac{2}{10} \cdot \frac{-60}{10} = \frac{-12}{10} = \frac{-6}{5}$$

Cevap: B

$$9. \quad \frac{\frac{1}{0,08} - 0,64}{\frac{1}{0,64} - 0,08} = \frac{\frac{100}{8} - \frac{64}{100}}{\frac{100}{64} - \frac{8}{100}} = \frac{\frac{25}{2} - \frac{16}{25}}{\frac{25}{16} - \frac{2}{25}}$$

$$= \frac{8 \left(\frac{25}{16} - \frac{2}{25} \right)}{\left(\frac{25}{16} - \frac{2}{25} \right)} = 8$$

Cevap: C

$$10. \quad a = 2 + \frac{0,99}{1 - \frac{1}{1,9}} = 2 + \frac{\frac{99}{99}}{1 - \frac{1}{\frac{19-1}{9}}}$$

$$= 2 + \frac{1}{1 - \frac{1}{\frac{18}{9}}}$$

$$= 2 + \frac{1}{1 - \frac{1}{2}}$$

$$= 2 + \frac{1}{\frac{1}{2}} = 2 + 2$$

$$= 4$$

Cevap: A

$$11. \quad \frac{0,ab}{0,b\bar{a}} = \frac{\frac{ab-a}{90}}{\frac{ba-b}{90}} = \frac{21}{29}$$

$$\frac{9a+b}{9b+a} \times \frac{21}{9}$$

$$261a + 29b = 198b + 21a$$

$$240a = 160b$$

$$3a = 2b$$

$$a = 2 \text{ ve } b = 3$$

için $a + b = 2 + 3 = 5$ olur.

Cevap: B

$$12. \quad (0,\bar{3} + 0,\bar{6} + 0,\bar{7}) \cdot a = b$$

$$\left(\frac{3}{9} + \frac{6}{9} + \frac{7}{9} \right) \cdot a = b$$

$$\frac{16}{9} \cdot a = b$$

$$16a = 9b \Rightarrow a = 9k$$

$$b = 16k$$

$$\Rightarrow \frac{a-b}{a+b} = \frac{9k-16k}{9k+16k} = \frac{-7k}{25k}$$

Cevap: E

$$13. \quad bc, a + ca, b + ab, c$$

$$= \frac{bca}{10} + \frac{cab}{10} + \frac{abc}{10}$$

$$= \frac{bca + cab + abc}{10}$$

$$= \frac{111(a+b+c)}{10} = \frac{(37) \cdot 3(a+b+c)}{10}$$

37'nin katı olduğundan 37 ile tam bölünür.

Cevap: D

$$14. \quad a + (0,02)^2$$

$$a + \left(\frac{2}{100} \right)^2 = a + \frac{4}{10000} = a + 0,0004$$

↓

..., 9996 olmalı

Cevap: D

$$1. \frac{0,3x}{0,0x} = 7$$

$$\frac{3x}{x} = 7 \Rightarrow 3x = 7 \cdot x$$

$$30 + x = 7x$$

$$130 = 6x$$

$$x = 5$$

Cevap: C

$$2. (0,3)(0,03)(0,003)$$

$$3 \cdot 10^{-1} \cdot 3 \cdot 10^{-2} \cdot 3 \cdot 10^{-3} = 27 \cdot 10^{-6}$$

Cevap: C

$$3. \quad -/ \quad m = \frac{3}{13} + \frac{2}{41} + \frac{8}{25}$$

$$+ \quad x = \frac{16}{13} + \frac{84}{41} + \frac{33}{25}$$

$$x - m = \frac{13}{13} + \frac{82}{41} + \frac{25}{25}$$

$$x - m = 1 + 2 + 1$$

$$x - m = 4 \Rightarrow x = m + 4$$

Cevap: A

$$4. \left(\frac{-3}{5} + \frac{x-1}{3} \right) \cdot 3$$

$$\frac{-9 + 5x - 5}{15} \cdot 3 = \frac{-14 + 5x}{5} = \frac{-14}{5} + x$$

$$x = \frac{-1}{5} \text{ için } \frac{-14}{5} - \frac{1}{5} = -3 \text{ olur.}$$

Cevap: A

$$5. \frac{13}{3 - \frac{1}{3 - \frac{1}{a}}} = 5 \Rightarrow \frac{13}{3 - \frac{1}{\frac{3a-1}{a}}} = 5$$

$$\Rightarrow \frac{13}{3 - \frac{a}{3a-1}} = 5 \Rightarrow \frac{13}{\frac{9a-3-a}{3a-1}} = 5$$

$$13 \cdot \frac{3a-1}{8a-3} = 5$$

$$39a - 13 = 40a - 15$$

$$2 = a$$

Cevap: A

$$6. \quad 1 + \frac{1}{1 + \frac{1}{3}} \cdot \frac{1}{3} = \frac{x}{y}$$

$$1 + \frac{1}{\frac{4}{3}} \cdot \frac{3}{1} = \frac{x}{y}$$

$$1 + \frac{3}{4} \cdot 3 = \frac{x}{y}$$

$$1 + \frac{9}{4} = \frac{x}{y}$$

$$\frac{13}{4} = \frac{x}{y}$$

$$x = 13k \quad y = 4k \quad k = 3 \text{ için}$$

iki basamaklı en küçük değerlerini alırlar.

$$x = 39 \quad y = 12$$

$$\Rightarrow x + y = 51 \text{ olur.}$$

Cevap: B

$$7. \quad \frac{20}{\frac{6 - \frac{4}{1 + \frac{1}{x}}}{2}} = 5$$

$$4 \cdot \frac{6 - \frac{4}{1 + \frac{1}{x}}}{2} = 5 \Rightarrow 1 + \frac{1}{x} = 2$$

$$\frac{1}{x} = 1$$

$$x = 1 \text{ olur.}$$

Cevap: D

8. • $0 < \frac{a+4}{2a+1} < 1 \Rightarrow$ Pozitif basit kesir

• $a + 4 < 2a + 1$ olmalı

$$3 < a$$

↳ a en az 4 olabilir.

Cevap: A

9. $\frac{5}{m-4}$ bileşik kesir ise

$$|m-4| \leq 5 \text{ olmalı}$$

$$\Rightarrow -5 \leq m-4 \leq 5$$

$$-1 \leq m \leq 9$$

$$-1 + 0 + 1 + 2 + 3 + 5 + 6 + 7 + 8 + 9 = 40$$

m sayısı 4 olamaz paydayı 0 yapar.

Cevap: C

10. $\frac{a+x}{b+x} = 2 \cdot \frac{a}{b}$

$$b(a+x) = 2a(b+x)$$

$$ba + bx = 2ab + 2ax$$

$$bx - 2ax = a.b$$

$$x(b-2a) = a.b$$

$$x = \frac{ab}{b-2a}$$

Cevap: B

11. $\frac{\frac{19}{x} + 1}{\left(\frac{1}{2} + 1\right)} : \left(\frac{1}{2} + 1\right) = \left(\frac{1}{2} + 1\right)$

$$\frac{\frac{19}{x} + 1}{\frac{3}{2}} : \frac{3}{2} = \frac{3}{2}$$

$$\frac{19+x}{x} \cdot \frac{2}{3} \cdot \frac{2}{3} = \frac{3}{2}$$

$$\frac{(19+x) \cdot 4}{9x} = \frac{3}{2}$$

$$8(19+x) = 27x$$

$$8 \cdot 19 + 8x = 27x$$

$$8 \cdot 19 = 19x$$

$$x = 8$$

Cevap: A

12. $\frac{a \cdot b}{c} \rightarrow \frac{\frac{a}{6} \cdot \frac{b}{6}}{\frac{c}{6}} = \frac{a \cdot b}{36} \cdot \frac{6}{c}$

$$= \frac{a \cdot b}{6 \cdot c}$$

Cevap: A

13. $\frac{0,04x+3}{0,07x+0,5} \times \frac{3}{4}$

$$0,16x + 12 = 0,21x + 1,5$$

$$10,5 = 0,05x$$

$$1050 = 5x$$

$$x = 210$$

Cevap: C

14. • $\frac{5a-3b}{b-5} = 0 \rightarrow \begin{pmatrix} b-5 \neq 0 \\ b \neq 5 \end{pmatrix}$

• $\frac{5a-3b}{b-5} = 0$

$$5a - 3b = 0$$

$$5a = 3b$$

$$(b \neq 5)$$

$$5a \neq 3 \cdot 5$$

$$a \neq 3$$

Cevap: E

1. $\frac{6+5x}{3x+m}$ kesrinin x 'e bağlı olmaması için (sabit kesir)

$$\frac{6}{m} + \frac{5x}{3x} \Rightarrow \frac{6}{m} \neq \frac{5}{3}$$

$$18 = 5m$$

$$m = \frac{18}{5}$$

Cevap: D

2. $6 - \frac{4}{2 + \frac{1}{x-1}} \rightarrow x-1=0$

$$x=1$$

$$6 - \frac{4}{2 + \frac{1}{x-1}} \rightarrow 2 + \frac{1}{x-1} = 0$$

$$\frac{1}{x-1} = -2$$

$$1 = -2x + 2$$

$$-1 = -2x$$

$$x = \frac{1}{2}$$

$$\Rightarrow 1 + \frac{1}{2} = \frac{3}{2}$$

Cevap: A

3. $\frac{a+15}{5} + \frac{b+14}{7} + \frac{c+27}{9}$

$$\frac{a}{5} + \frac{15}{5} + \frac{b}{7} + \frac{14}{7} + \frac{c}{9} + \frac{27}{9}$$

$$= \frac{a}{5} + 3 + \frac{b}{7} + 2 + \frac{c}{9} + 3$$

$$= \frac{a}{5} + \frac{b}{7} + \frac{c}{9} + 8$$

$$\frac{12}{12}$$

$$= 20$$

Cevap: C

4. • 8 eş dilime ayrılmış pizzanın $\frac{3}{8}$ 'ü 4 kişiye eşit paylaştırı-

$$\text{İrse bir kişiye } \frac{3}{8} \cdot \frac{1}{4} = \frac{3}{32} \text{ pay düşer.}$$

$$\text{Kalan } 1 - \frac{3}{8} = \frac{5}{8} \text{ payın } \frac{3}{10} \text{'unu Canan yiyorsa}$$

$$\frac{5}{8} \cdot \frac{3}{10} = \frac{3}{16} \text{ pay Canan'a düşer.}$$

$$\Rightarrow \frac{3}{16} = \frac{3}{32} \cdot ?$$

$$? = 2$$

Cevap: B

TASARI EĞİTİM YAYINLARI

5. 1. hamle $\frac{1}{2}$
2. hamle $\frac{1}{2} \cdot \frac{1}{2} = \frac{1}{4}$
3. hamle $\frac{1}{4} \cdot \frac{1}{2} = \frac{1}{8}$
4. hamle $\frac{1}{8} \cdot \frac{1}{2} = \frac{1}{16}$
5. hamle $\frac{1}{16} \cdot \frac{1}{2} = \frac{1}{32}$

$$\text{köşegen boyunca kesilirse } \frac{1}{32} \cdot \frac{1}{2} = \frac{1}{64}$$

Cevap: C

6. • $m = \frac{x+y}{x} = \frac{x}{x} + \frac{y}{x} = 1 + \frac{y}{x}$

• $0 < x < y$

$$\frac{0}{x} < \frac{x}{x} < \frac{y}{x}$$

$$0 < 1 < \frac{y}{x}$$

$$0 + 1 < 1 + 1 < \frac{y}{x} + 1$$

$$2 < m$$

$$\downarrow \frac{5}{2} \text{ olabilir.}$$

Cevap: E

7. Toplam 18 parça 360 ml ise her parça $360:18 = 20$ ml
Çınar 7 bölme içmiş o halde toplam $7 \cdot 20$ ml = 140 ml su içmiştir.

Cevap: B

$$8. \quad x + \frac{1}{y + \frac{2}{z}} = \frac{13}{5} = 2 + \frac{3}{5}$$

$$= 2 + \frac{1}{\frac{5}{3}}$$

$$= 2 + \frac{1}{1 + \frac{2}{3}}$$

$$\Rightarrow x = 2 \quad y = 1 \quad \text{ve} \quad z = 3 \quad \text{olmalı}$$

$$\Rightarrow x \cdot y \cdot z = 2 \cdot 1 \cdot 3 = 6 \quad \text{olur.}$$

Cevap: B

$$9. \quad \frac{2x}{5x} \Rightarrow \frac{2x-5}{5x-5} \cdot \frac{1}{4}$$

$$8x - 20 = 5x - 5$$

$$3x = 15$$

$$x = 5$$

$$\Rightarrow 2x + 5x = 7x = 7 \cdot 5 = 35$$

Cevap: E

10. $y < x < z = 200$

$$\bullet \quad \frac{z}{x+y} = \frac{200}{x+y} \rightarrow \text{bileşik ise}$$

$$x + y \leq 200$$

$$\hookrightarrow x + y = 200$$

$$\bullet \quad \frac{y}{x} \text{ basit kesir ise}$$

$$y < x \quad (x + y = 200)$$

$$\frac{99}{101}$$

$$\hookrightarrow \text{en çok 99 olur.}$$

Cevap: B

11. Sayaç 16 eşit bölme ayrılmış ve ibre 9 ile 10 bölmeler arasında olduğundan

$$\Rightarrow \frac{9}{16} < \text{su} < \frac{10}{16}$$

$$\bullet \quad \frac{2.9}{2.16} < \text{su} < \frac{10.2}{16.2} \Rightarrow \frac{18}{32} < \text{su} < \frac{20}{32}$$

$$\downarrow$$

$$\frac{19}{32}$$

$$\bullet \quad \frac{4.9}{4.16} < \text{su} < \frac{10.4}{16.4} \Rightarrow \frac{36}{64} < \text{su} < \frac{40}{64}$$

$$\downarrow$$

$$\frac{39}{64}$$

II ve III olabilir.

Cevap: D

12. Doğru $\frac{1}{2} = \frac{3}{2}$

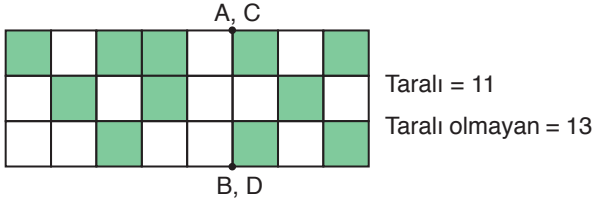
Hatalı $\frac{1}{2} = \frac{1}{2} \cdot \frac{1}{3} = \frac{1}{6}$

$$\Rightarrow \frac{1}{6} = \frac{3}{2} \cdot ?$$

$$\Rightarrow ? = \frac{2}{18} = \frac{1}{9} \quad \text{olur.}$$

Cevap: E

13.



$$\Rightarrow \frac{\text{Taralı}}{\text{Taralı Olmayan}} = \frac{11}{13} > \frac{4}{5} \text{ olur.}$$

Cevap: E

14.

$$\begin{aligned} & \frac{1}{20} + \frac{1}{30} + \frac{1}{42} \\ &= \frac{1}{4.5} + \frac{1}{5.6} + \frac{1}{6.7} \\ &= \frac{1}{4} - \frac{1}{5} + \frac{1}{5} - \frac{1}{6} + \frac{1}{6} - \frac{1}{7} \\ &= \frac{1}{4} - \frac{1}{7} = \frac{7-4}{28} = \frac{3}{28} \text{ olur.} \end{aligned}$$

Cevap: D

$$1. a = \frac{0,25}{0,5} = \frac{25}{50} = \frac{1}{2}$$

$$b = \frac{1}{2}$$

$$c = 0,19 = \frac{19-1}{90} = \frac{18}{90} = \frac{1}{5}$$

$$\Rightarrow c < a = b$$

Cevap: C

$$2. m < 0 \Rightarrow m = -1 \text{ olsun}$$

$$x = \frac{-1}{4} \quad y = \frac{-1}{5} \quad z = \frac{-1}{6}$$

$$\Rightarrow x < y < z$$

Cevap: B

$$3. a < b < -4$$

$$\frac{-6}{-5}$$

$$\bullet x = \frac{4}{a} = \frac{4}{-6} = \frac{-2}{3}$$

$$y = \frac{b}{4} = \frac{-5}{4}$$

$$z = \frac{a}{b} = \frac{-6}{-5} = \frac{6}{5}$$

$$\Rightarrow y < x < z$$

Cevap: D

$$4. a < 0$$

$$\frac{0,42}{a} = \frac{0,43}{b} = \frac{0,44}{c}$$

$$a = -0,42$$

$$b = -0,43 \Rightarrow c < b < a$$

$$c = -0,44$$

Cevap: E

$$5. \bullet \frac{c-b}{b} \times \frac{2}{3} \Rightarrow 3c - 3b = 2b$$

$$3c = 5b$$

$$\bullet \frac{c+a}{a} \times \frac{2}{5} \Rightarrow 5c + 5a = 2a$$

$$5c = -3a \quad (a > 0)$$

$$\Rightarrow c = -3, \quad a = 5$$

$$\Rightarrow 3c = 5b \Rightarrow b = \frac{-9}{5}$$

$$\Rightarrow c < b < a$$

Cevap: D

$$6. \triangle_{-8} = \frac{-8}{3} = a$$

$$\square_{-14} = \frac{-14}{4} = b$$

$$\text{pentagon}_{-15} = \frac{-15}{5} = -3 = c$$

$$\Rightarrow \frac{-14}{4} < -3 < \frac{-8}{3}$$

$$b < c < a$$

Cevap: C

$$7. 25.17,6 = x.27,5$$

$$25.176 = x.275$$

$$\frac{16}{176} = x.11$$

$$16 = x$$

Cevap: B

$$8. \frac{3a}{5} + \frac{a}{1} + \frac{2a}{3} = 4 \frac{8}{15}$$

$$\frac{9a + 15a + 10a}{15} = \frac{68}{15}$$

$$34a = 68$$

$$a = 2$$

Cevap: B

$$9. \quad \begin{array}{ccc} x < y < z \\ -3 & -2 & -1 \end{array}$$

$$A) \quad \frac{x}{z} = \frac{-3}{-1} = 3 \rightarrow \text{Diğerlerinden büyük}$$

Cevap: A

10. Bardakların hacmine 300 ml dersek sürahideki su

$$3 \cdot 300 + 3 \cdot 300 \cdot \frac{1}{3} = 1200 \text{ ml'dir.}$$

O halde bir bardak su sürahideki suyun

$$\frac{300}{1200} = \frac{1}{4} \text{ 'ü ile doldurulabilir.}$$

Cevap: E

11. A damacanası 15 eşit bölme ve içindeki su 6 bölme

$$\Rightarrow \begin{array}{ccc} 15 & \times & 3 \text{ lt} \\ 6 & \times & ? \end{array}$$

$$? = \frac{18}{15} = 1,2 \text{ lt}$$

B damacanası 15 eşit bölme ve içindeki su 8 bölme

$$\begin{array}{ccc} 8 & \times & 12 \text{ lt} \\ 15 & \times & ? \end{array}$$

$$8 \cdot ? = 18 \Rightarrow ? = \frac{18}{8} = \frac{9}{4} \text{ lt}$$

Cevap: E

$$12. \quad a = \frac{x}{y} \Rightarrow b = \frac{y}{x}$$

$$a = \frac{3}{b} + \frac{3}{5}$$

$$\frac{x}{y} + \frac{3}{\frac{y}{x}} + \frac{3}{5}$$

$$\frac{x}{y} = \frac{3x}{y} + \frac{3}{5}$$

$$\frac{x}{y} - \frac{3x}{y} = \frac{3}{5} \Rightarrow \frac{-2x}{y} = \frac{3}{5}$$

$$\frac{x}{y} = \frac{-3}{10}$$

$$\Rightarrow a - b = \frac{-3}{10} + \frac{10}{3} = \frac{91}{30}$$

Cevap: D

$$13. \quad A = \frac{7}{16} \text{ 'dir.}$$

$$I. \quad 5A = \frac{5 \cdot 7}{16} = \frac{35}{16} > 2 \text{ Doğru}$$

$$II. \quad 2A - 1 = 2 \cdot \frac{7}{16} - 1 = \frac{-2}{16} = \frac{-1}{8} < \frac{-1}{9} \text{ yanlış}$$

$$III. \quad A = \frac{7}{16} < 1. \text{ Doğru.}$$

Cevap: D