

BANKACILIK ve SİGORTACILIK PROGRAMI

1. ve 11. ÖĞRETİM QUIZ (28.10.25)

CEVAP ANAHTARI

① $|1x+1|-2=3$

$$|x+1|-2=3, \quad |x+1|-2=-3$$

$$|x+1|=5 \quad |x+1|=-1 \text{ (Çözüm yok)}$$

$$x+1=5 \Rightarrow x_1=4, \quad x+1=-5 \Rightarrow x_2=-6$$

② $|3x+9| > 15 \Rightarrow 3x+9 > 15 \Rightarrow 3x > 6 \Rightarrow x > 2$
 $3x+9 < -15 \Rightarrow 3x < -24 \Rightarrow x < -8$

$[2, +\infty)$ ve $(-\infty, -8]$ çözüm aralıklarıdır.

③ x ve y birer tam sayı o.ö.

$$3^{4x-8} = 6^{y-x} \Rightarrow 3^{4x-8} = 3^{y-x} \cdot 2^{y-x}$$

$$\Rightarrow \frac{3^{4x-8}}{3^{y-x}} = 2^{y-x} \Rightarrow 3^{4x-8-y+x} = 2^{y-x}$$

$$\Rightarrow 3^{5x-y-8} = 2^{y-x}$$

$$\Rightarrow y-x=0 \Rightarrow x=y, \quad 5x-y-8=0 \quad 5x-x-8=0$$

$$4x=8$$

$$x+y=2+2=4$$

$$x=2, y=2$$

④ $2^{4x} \cdot 32 = 16 \Rightarrow 2^{4x} \cdot 2^5 = 2^4 \Rightarrow 2^{4x+5} = 2^4$

$$4x+5=4 \Rightarrow 4x=-1 \Rightarrow x=-1$$

Doç.Dr. Auren ARGÜN