

Ruang :	_____
Waktu Kerjanya :	_____
Dosen :	_____
Tanggal :	_____

I. Ket :

- APK edukasi (u_1) = 2d₁
- APK market place (u_2) = 2d₂
- 2 weeks = 120.000 d₁ + 150.000 d₂
- Kendala jam developer ≤ 600
- APK u_1 : 8 jam } $8 u_1 + 12 u_2 \leq 600$
- APK u_2 : 12 jam }

- Kendala jam ui/up ≤ 300
- APK. u_1 : 4 jam } $4 u_1 + 3 u_2 \leq 300$
- APK. u_2 : 3 jam }

Ketentuan : $d_1 \geq 0, d_2 \geq 0$

$$D. \quad 8u_1 + 12u_2 \leq 600 \quad 4u_1 + 3u_2 \leq 300$$

$$\begin{array}{r|rr} u_1 & 75 & 0 \\ \hline u_2 & 0 & 50 \end{array} \quad (75, 0) B \quad \begin{array}{r|rr} u_1 & 75 & 0 \\ \hline u_2 & 0 & 100 \end{array} \quad (75, 0) D$$

$$\begin{array}{r|rr} u_1 & 0 & 50 \\ \hline u_2 & 0 & 0 \end{array} \quad (0, 50) A \quad \begin{array}{r|rr} u_1 & 0 & 100 \\ \hline u_2 & 0 & 0 \end{array} \quad (0, 100) C$$

$$P. \quad 8u_1 + 12u_2 \leq 600 \quad 8u_1 + 12u_2 \leq 600$$

$$4u_1 + 3u_2 \leq 300 \quad 4u_1 + 3u_2 \leq 300$$

$$8u_1 + 12u_2 \leq 600 \quad 8u_1 + 12u_2 \leq 600$$

$$4u_1 + 3u_2 \leq 300 \quad 4u_1 + 3u_2 \leq 300$$

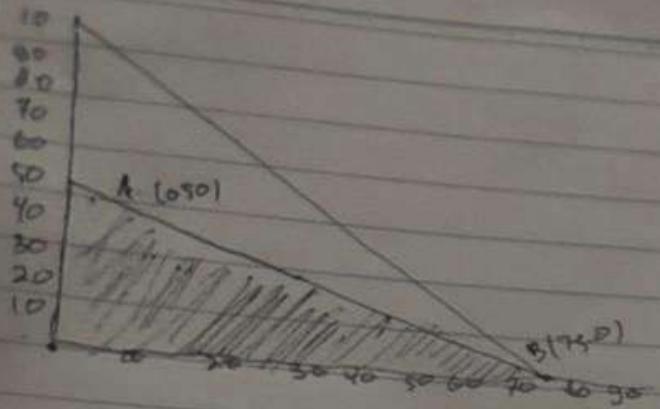
$$\begin{array}{rcl} 16u_1 + 12u_2 & \leq & 1.200 \\ -8u_1 + 0 & \leq & -600 \\ \hline 8u_1 & \leq & -600 \\ \hline u_1 & \leq & -\frac{600}{8} \\ u_1 & \leq & -75 \end{array}$$

$$\begin{array}{rcl} 8u_1 + 12u_2 & \leq & 600 \\ 4u_1 + 3u_2 & \leq & 300 \\ \hline 8u_1 + 6u_2 & \leq & 600 \\ 0 + 6u_2 & \leq & 0 \\ \hline u_2 & \leq & 0 \end{array}$$

$$\text{Titik O} : (0,0) \quad 120.000(0) + 150.000(0) = 0$$

$$\dots A : (0,50) \quad 120.000(0) + 150.000(50) = 7.500.000$$

$$\text{Titik B} : (0,0) \quad 120.000(75) + 150.000(0) = 9.000.000$$



2) ket $S_{1A} = 12$ $S_{2A} = 14$
 $S_{1B} = 10$ $S_{2B} = 9$
 $S_{1C} = 9$ $S_{2C} = 11$

$$\text{Matk 2} = 12S_{1A} + 10S_{1B} + 9S_{1C} + 14S_{2A} + 9S_{2B} + 11S_{2C}$$

$$\text{Batas kapasitas} = \text{Server } S_2 = S_{1A} + S_{1B} + S_{1C} = 100 \text{ TB}$$

$$\therefore S_2 = S_{2A} + S_{2B} + S_{2C} = 120 \text{ TB}$$

$$\text{Batas pemintaan wilayah A : } S_{1A} + S_{2A} = 80 \text{ TB}$$

$$\therefore B = S_{1B} + S_{2B} = 90 \text{ TB}$$

$$\therefore C = S_{1C} + S_{2C} = 50 \text{ TB}$$

o alokasi profit besar

- laba tertinggi: $S_{1A} = 14$ $\star = 8 \text{ TB}$

Batas pemintaan wilayah $S_{1A} = 14$

Salah kapasitas S_2 - Batas pemintaan wilayah A

$$120 - 80 = 40 \text{ (sisa } S_2)$$

Pemintaan B terpenuhi

- laba tertinggi $S_{1C} = 9$

Batas pemintaan wilayah C = 50 TB

Salah kapasitas $S_2 = 40$

Kapasitas S_2 - Batas pemintaan wilayah C

$$40 - 50 = 10 \text{ (lebih banyak)}$$

- laba tertinggi $S_{1B} = 10$

Batas pemintaan wilayah B = 90 TB

Kapasitas S_2 - Batas pemintaan wilayah B

$$= 100 - 90 = 10 \text{ (sisa } S_2)$$

B terpenuhi

4. Perumahan C kurang = 10

Sisa kapasitas S₁ = 10 TB.

• Sisa kapasitas S₂ - Perumahan C

= 10 - 10 = 0

C tetap punah

Jadi Sisa Perumahan tersedia

▷ Total lahan maksimum.

$$z_{\text{maks}} : (S_1 \cdot 10) + (S_2 \cdot g) + (S_2 \cdot u) + (S_2 \cdot n)$$

$$= 10 \cdot 10 + 10 \cdot g + 10 \cdot u + 10 \cdot n$$

$$= 100 + 10g + 10u + 10n$$

$$= 2.500.$$

kls.

Lahan tersedia.

$$S_1 \rightarrow \text{irrigasi } \rightarrow 10 = 10 \text{ TB.}$$

$$S_2 \rightarrow \text{ } \dots \text{ } \rightarrow 10 = 10 \text{ TB}$$

$$S_2 \rightarrow \text{ } \dots \text{ } \leftarrow 10 = 10 \text{ TB}$$

$$\text{Lahan maks} = 2.500 \text{ TB.}$$