

Answers

1. OKLAHOMA_

2. a. $X = \begin{bmatrix} 183464 \\ 304005 \\ 42037 \end{bmatrix}$

b. To produce the quantities given in the *Demands* matrix, it is necessary to produce 42,037 worth of transportation.

c. The 0.41 means that it is necessary to use \$0.41 worth of sector 3 (transportation) for each \$1.00 worth of sector 2 (industry) that is produced.

d. The input is Industry (Row 2) The output is Agriculture (Column 3), so the coefficient is 0.71.

It takes $0.071 \times \$10.00 = \0.71 , or 71 cents.

3. a. 3

b. E

c. $AE = A$

d. $E - A = \begin{bmatrix} 0 & -14 & -2 \\ -2 & -7 & -1 \\ -9 & -3 & -3 \end{bmatrix}$

4. a. 3x2 f. NA

b. NA g. 2x3

c. 3x3 h. NA

d. NA i. 3x2

e. 3x2 j. 2x2

5. $x = 2$

$y = 1$

$z = 4$

$w = 3$