

## Bellringers

*These problems are intended to provide practice in conversions of time and money.*

1. 52 weeks = 1 year(s)

2. 60 seconds = 1 minute(s)

3. 14 days = 2 week(s)

4. 1 hour = 60 minute(s)

5. 1 minute = 60 second(s)

6. 1 hour = 3600 second(s)

7. 1 day = 24 hour(s)

### Dividing Matrices

\*You canNOT divide matrices

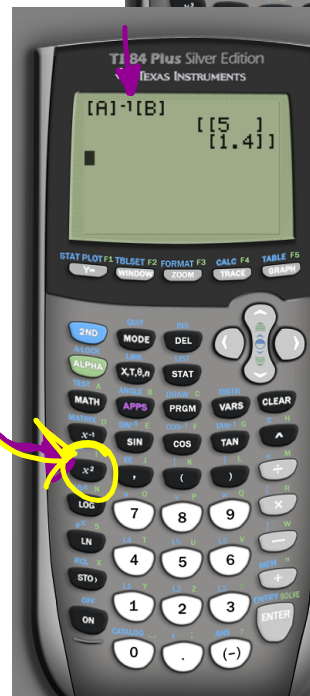
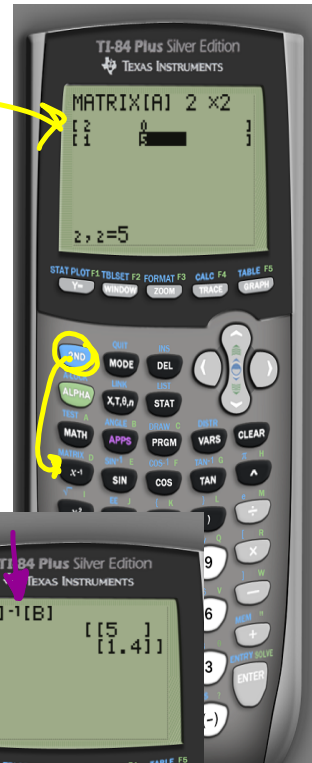
\*\* You must multiply by the INVERSE

ex.)

$$\begin{bmatrix} 2 & 0 \\ 1 & 5 \end{bmatrix} X = \begin{bmatrix} 10 \\ 12 \end{bmatrix}$$

$$X = A^{-1} B$$

$$X = \begin{bmatrix} 5 \\ 1.4 \end{bmatrix}$$



$$\begin{cases} 2x + 3y = 11 \\ x + 2y = 6 \end{cases} \quad (4.1)$$

$$\begin{bmatrix} 2 & 3 \\ 1 & 2 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 11 \\ 6 \end{bmatrix}$$

$$AX = B$$
$$X = A^{-1}B$$

page 213  
#(7-15)

Solve each system of equations. Check your answers.

$$7. \begin{cases} x + 3y = 5 \\ x + 4y = 6 \end{cases}$$

$$8. \begin{cases} p - 3q = -1 \\ -5p + 16q = 5 \end{cases}$$

$$9. \begin{cases} 300x - y = 130 \\ 200x + y = 120 \end{cases}$$

$$10. \begin{cases} x + 5y = -4 \\ x + 6y = -5 \end{cases}$$

$$11. \begin{cases} 2x + 3y = 12 \\ x + 2y = 7 \end{cases}$$

$$12. \begin{cases} 2x + 3y = 5 \\ x + 2y = 6 \end{cases}$$

$$13. \begin{cases} x + y + z = 4 \\ 4x + 5y + 0z = 3 \\ 0x + y - 3z = -10 \end{cases}$$

$$14. \begin{cases} 0x + 9y + 2z = 18 \\ 3x + 2y + z = 5 \\ x - y + 0z = -1 \end{cases}$$

$$15. \begin{cases} 0 + 9y + 2z = 14 \\ 3x + 2y + z = 5 \\ x - y + 0 = -1 \end{cases}$$

