

$$(11)(e) \text{ HW } \quad 21, 248 \quad \Big| = 2 + 1 + 2 + 4 + 8 = 17$$

$$\begin{array}{r} + \quad - \\ 1 \quad 8 \end{array}$$

So, if we add 1 to 17 we get 18 which is divisible by 9.

If we subtract 8 to 17 we get 9 which is divisible by 9.

$$(f) \quad \begin{array}{r} 45,400 \\ + \quad \quad - \\ 5 \quad \quad 4 \end{array} \quad \Bigg| \quad = 4 + 5 + 4 + 0 + 0 = 13$$

So, if we add 5 to 13 we get 18 which is divisible by 9

So, If we subtract 4 to 13 we get 9 which is divisible by 9.

$$(g) \quad \begin{array}{r} 2128 \\ + \quad \quad - \\ 5 \quad \quad 4 \end{array} \quad \Bigg| \quad = 2 + 1 + 2 + 8 = 13$$

So, if we add 5 to 13 we get 18 which is divisible by 9.

If we subtract 4 to 13 we get 9 which is divisible by 9.

$$(h) \quad \begin{array}{r|l} 8140 & + \\ \hline 5 & - \end{array} \quad = \quad 8 + 1 + 4 + 0 = 13$$

So, if we add 5 to 13 we get 18 which is divisible by 9.

If we subtract 4 to 13 we get 9 which is divisible by 9.

$$(13)(c) \text{ HW } \begin{array}{r|l} 2146 & + \\ \hline 4 & - \end{array} \quad = \text{ So, if we add 4 to 6 we get 0 in the ones place. So, } 2,146 + 4 = 2,150 \text{ which is divisible by 5.}$$

If we subtract 1 to 6 we get 5 in the ones place. So, $2,146 - 1 = 2,145$ which is divisible by 5.

(d) $6,149 \begin{array}{l} + \\ 1 \end{array} \begin{array}{l} - \\ 4 \end{array} \Bigg| =$ If we add 1 to 9 we get 0 in the ones place.
So, $6,149 + 1 = 6,150$ which is divisible by 5.

If we subtract 4 to 9 we get 5 in the ones place.
So, $6,149 - 4 = 6,145$ which is divisible by 5.

(14) HW(c) $112 \begin{array}{l} + \\ 2 \end{array} \begin{array}{l} - \\ 4 \end{array} \Bigg| = 1 + 1 + 2 = 4$
 $4 + 2 = 6$

If we add 2 to 112 we get 114 which is divisible by 3 and 2.

If we subtract 4 to 112 we get 108 which is divisible by 3 and 2.

$$(d) \quad \begin{array}{r|l} 223 \cdot 5 & = 2 + 2 + 3 = 7 \\ + 5 & \\ \hline 5 & 7 + 5 = 12 \\ 1 & \end{array}$$

If we add 5 to 223 we get 228 which is divisible by 3 and 2

If we subtract 1 to 223 we get 222 which is divisible by 2 and 3.

$$(e) \quad \begin{array}{r|l} 1,816 & = 1 + 8 + 1 + 6 = 16 \\ + 2 & \\ \hline 2 & 16 + 2 = 18 \\ 4 & \end{array}$$

If we add 2 to 1,816 we get 1,818 which is divisible by 2 and 3.

If we subtract 4 to 1,816 we get 1,812 which is divisible by 2 and 3.

(f)
$$\begin{array}{r|l} 1052 & = 1 + 0 + 5 + 2 = 8 \\ + 4 & \\ \hline 4 & 2 \end{array} \quad \begin{array}{l} 8 + 4 = 12 \end{array}$$

If we add 4 to 1052 we get 1056 which is divisible by 3 and 2.

If we subtract 2 to 1052 we get 1050 which is divisible by 3 and 2.

(g)
$$\begin{array}{r|l} 3146 & = 3 + 1 + 4 + 6 = 14 \\ + 4 & \\ \hline 4 & 2 \end{array} \quad \begin{array}{l} 14 + 4 = 18 \end{array}$$

If we add 4 to 3146 we get ~~3150~~³¹⁵⁰ which is divisible by 3 and 2.

If we subtract 2 to 3146 we get 3144 which is divisible by 3 and 2.

$$(h) \quad 31,921 \quad | = 3 + 1 + 9 + 2 + 1 = 16$$

$$+ 5 - 1 = 21$$

If we add 5 to 31,921 we get 31,926 which is divisible by 3 and 2.

If we subtract 1 to 31,921 we get 31,920 which is divisible by 3 and 2.