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2.3

- 1) a) $1/x$ is meaningless when $x=0$, $f(0)$ is not defined
- 7) a) There is no maximum integer since all positive integers can be the possible maximum.
The domain is $\mathbb{Z}^+ \times \mathbb{Z}^+$
The range is \mathbb{Z}^+
- 9) a) 1

2.4

- 1) a) $2 \cdot (-3)^0 + 5^0 = 2 \cdot 1 + 1 = 3$

b) $2 \cdot (-3)^1 + 5^1 = -1$

c) $2 \cdot (-3)^4 + 5^4 = 2 \cdot 81 + 625 = 162 + 625 = 787$
- 3) a) $a_0 = 2^0 + 1 = 2$,
 $a_1 = 2^1 + 1 = 3$,
 $a_2 = 2^2 + 1 = 5$,
 $a_3 = 2^3 + 1 = 9$

2.6

1 a) Size of A is 3 x 4 matrix

b) 3 x 1 matrix

First row = {1}

Second row = {4}

Third row = {3}

3) a) First row = {1 11}

Second row = {2 18}

27 a) $A \vee B$

First row = {1 1 1}

Second row = {1 1 1}

Third row = {1 0 1}