$\qquad$

1. Write a DNF Boolean expression whose output is given by the table below.
2. Design a Boolean circuit for your answer to Question 1.

| $X$ | $Y$ | $Z$ |  |
| :---: | :---: | :---: | :---: |
| 1 | 1 | 1 | 0 |
| 1 | 1 | 0 | 0 |
| 1 | 0 | 1 | 0 |
| 1 | 0 | 0 | 0 |
| 0 | 1 | 1 | 1 |
| 0 | 1 | 0 | 0 |
| 0 | 0 | 1 | 1 |
| 0 | 0 | 0 | 0 |

Name: $\quad$ QuIz 7 $\diamond \quad$| MATH 211 |
| ---: |
| February 9, 2023 |

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| 0 | 1 | 0 | 0 |
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Name: $\quad$ QuIz 7 $8 \quad$| MATH 211 |
| ---: |
| February 9, 2023 |

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| :---: | :---: | :---: | :---: |
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| 1 | 0 | 0 | 0 |
| 0 | 1 | 1 | 1 |
| 0 | 1 | 0 | 0 |
| 0 | 0 | 1 | 0 |
| 0 | 0 | 0 | 0 |

