$\qquad$

1. Suppose $A=\{0,2,4,6,8\}$ and $B=\{4,5,6,7,8\}$ have universal set $U=\{0,1,2,3,4,5,6,7,8\}$. Find:
(a) $A-B=$
(b) $A \cap B=$
(c) $\bar{B}=$
(d) $B \cap \bar{B}=$
(e) $A \cup B=$
(f) $\overline{A \cup B}=$
2. Suppose $A_{1}=\{a, b, c, d, e\}, A_{2}=\{d, e, f\}$ and $A_{3}=\{e, f, g, h\}$.
(a) $\bigcup_{i=1}^{3} A_{i}=$
(b) $\bigcap_{i=1}^{3} A_{i}=$
$\qquad$
Name:
3. Suppose $A=\{0,2,4,6,8\}$ and $B=\{4,5,6,7,8\}$ have universal set $U=\{0,1,2,3,4,5,6,7,8\}$. Find:
(a) $\bar{A}=$
(b) $B-A=$
(c) $B-\bar{A}=$
(d) $A \cup \bar{A}=$
(e) $A \cap \bar{A}=$
(f) $\overline{A \cap \bar{A}}=$
4. Suppose $A_{1}=\{a, b, c, d, e\}, A_{2}=\{d, e, f\}$ and $A_{3}=\{e, f, g, h\}$.
(a) $\bigcup_{i=1}^{3} A_{i}=$
(b) $\bigcap_{i=1}^{3} A_{i}=$
5. Suppose $A=\{4,5,6,7,8\}$ and $B=\{0,2,4,6,8\}$ have universal set $U=\{0,1,2,3,4,5,6,7,8\}$. Find:
(a) $\bar{A}=$
(b) $\bar{B}=$
(c) $B \cap \bar{A}=$
(d) $B \cup \bar{A}=$
(e) $A-\bar{A}=$
(f) $\overline{A \cup B}=$
6. Suppose $A_{1}=\{a, b, c, d, e\}, A_{2}=\{d, e, f\}$ and $A_{3}=\{e, f, g, h\}$.
(a) $\bigcup_{i=1}^{3} A_{i}=$
(b) $\bigcap_{i=1}^{3} A_{i}=$

| Name: $\quad$ QuIz 3 $\varnothing$ | MATH 211 |
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| January 26, 2023 |  |

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