1 Numbers in other bases - practice

Sharpen your calculation skills in other bases

For reference, our convention for base-26 is to use the letters A-Z as the digits 0-25:

Instructions: Calculate the sum, difference, product, or quotient & remainder. Your answer should be in the starting base unless otherwise specified.

Question 1 $(143)_7 + (53)_7 = ($ $)_7$

Question 2 $(4671)_8 + (327)_8 = ($ $)_8$

Question 3 $(APPLE)_{26} + (WINDOWS)_{26} = ($ $)_{26}$

Question 4 $(451)_9 - (332)_9 = ($ $)_9$

Question 5 $(11011001)_2 - (11011)_2 = ($ $)_2$

Question 6 $(BABAA)_{26} \times (MOO)_{26} = ($ $)_{26}$

Question 7 $(8663422)_9 \times (2241)_9 = ($ $)_9$

Question 8 $(8663422)_9 \div (2241)_9 = ($)₉ and remainder ()₉

Table 1: Digits for base-26.

| | 8 | | | | | | | | | | | | |
|----|----|----|----|---------------|----|----|----|----|----|----|----|----|--|
| A | B | C | D | $\mid E \mid$ | F | G | H | I | J | K | L | M | |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| N | O | P | Q | R | S | T | U | V | W | X | Y | Z | |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | |