Addition

1. $1110011100\ \ 1110101_{(2)} + 1101111011\ \ 111_{(2)} = ?_{(2)}$

   R: $1111010100\ \ 1010100_{(2)}$

2. $23045_{(6)} + 100254_{(6)} = ?_{(6)}$

   R: $123343_{(6)}$

3. $54AB6F_{(16)} + CD097D_{(16)} = ?_{(16)}$

   R: $121B4EC_{(16)}$

4. $2122012_{(3)} + 10112222_{(3)} = ?_{(3)}$

   R: $20012011_{(3)}$

5. $3220013_{(4)} + 22303231_{(4)} = ?_{(4)}$

   R: $32123310_{(4)}$

6. $3401323_{(5)} + 444033_{(5)} = ?_{(5)}$

   R: $4400411_{(5)}$

7. $6543210_{(7)} + 664455_{(7)} = ?_{(7)}$

   R: $10540665_{(7)}$

8. $5677034_{(8)} + 1234567_{(8)} = ?_{(8)}$

   R: $7133623_{(8)}$

9. $ABCDE_{(16)} + D9037F_{(16)} = ?_{(16)}$

   R: $E3C05D_{(16)}$

10. $1100101011_{(2)} + 11101101_{(2)} = ?_{(2)}$

    R: $10000011000_{(2)}$

Subtraction

1. $1000110001\ \ 0_{(2)} - 1110111011\ _{(2)} = ?_{(2)}$

   R: $10100111\ _{(2)}$

2. $102387\ _{(9)} - 64502\ _{(9)} = ?_{(9)}$

   R: $26785\ _{(9)}$

3. $501BA_{(16)} - 32ED_{(16)} = ?_{(16)}$

   R: $4CECD\ _{(16)}$

4. $130046_{(8)} - 71257_{(8)} = ?_{(8)}$

   R: $36567_{(8)}$

5. $210354_{(7)} - 55466_{(7)} = ?_{(7)}$

   R: $121555_{(7)}$

6. $210354_{(6)} - 44355_{(6)} = ?_{(6)}$

   R: $121555_{(6)}$

7. $102003_{(5)} - 3333_{(5)} = ?_{(5)}$
   R: $43120_{(5)}$
8. $102003_{(4)} - 3333_{(4)} = ?_{(4)}$
   R: $32010_{(4)}$
9. $100111000_{(2)} - 1100111_{(2)} = ?_{(2)}$
   R: $11010001_{(2)}$
10. $10B009_{(16)} - A5FCD_{(16)} = ?_{(16)}$
    R: $6503C_{(16)}$

Multiplication by one digit

1. $7023_{(8)} * 5_{(8)} = ?_{(8)}$
   R: $43137_{(8)}$
2. $32001B_{(16)} * 6_{(16)} = ?_{(16)}$
   R: $12C00A2_{(16)}$
3. $12345_{(7)} * 5_{(7)} = ?_{(7)}$
   R: $65424_{(7)}$
4. $12345_{(6)} * 5_{(6)} = ?_{(6)}$
   R: $111101_{(6)}$
5. $31203_{(5)} * 3_{(5)} = ?_{(5)}$
   R: $144114_{(5)}$
6. $31203_{(4)} * 3_{(4)} = ?_{(4)}$
   R: $220221_{(4)}$
7. $21563_{(8)} * 7_{(8)} = ?_{(8)}$
   R: $174045_{(8)}$
8. $A23F4_{(16)} * B_{(16)} = ?_{(16)}$
   R: $6F8B7C_{(16)}$

Division by one digit

1. $20101_{(3)} : 2_{(3)} = ?_{(3)}$
   R: $10012_{(3)}$ *remainder* $0_{(3)}$
2. $1FED0205_{(16)} : 9_{(16)} = ?_{(16)}$
   R: $38C1CAB_{(16)}$ *remainder* $2_{(16)}$
3. $120456_{(8)} : 6_{(8)} = ?_{(8)}$
   R: $15335_{(8)}$ *remainder* $0_{(8)}$

4. $120456_{(7)} : 6_{(7)} = ?_{(7)}$

   R: $13421_{(8)}$ *remainder* $0_{(8)}$

5. $321023_{(5)} : 3_{(5)} = ?_{(5)}$

   R: $103322_{(5)}$ *remainder* $2_{(5)}$

6. $321023_{(4)} : 3_{(4)} = ?_{(4)}$

   R: $103003_{(4)}$ *remainder* $2_{(4)}$

7. $2A0F86_{(16)} : E_{(16)} = ?_{(16)}$

   R: $3011B_{(16)}$ *remainder* $C_{(16)}$

8. $765433_{(8)} : 4_{(8)} = ?_{(8)}$

   R: $175306_{(8)}$ *remainder* $3_{(8)}$