Multiplying and subtracting quiz.

1 a) $\not{0}1\not{0}111_2$
$-100000_2$
$0110111_2$

$= 0110111_2$

b) $0\not{1}\not{0}\not{0}\not{0}1_2$
$-101010_2$
$0110111_2$

$= 0110111_2$

Multiplication

c) $111002$
$\times 101_2$
$111100$
$+100000$
$111100$
$010001100_2$

$= 010001100_2$

d) $11010_2$
$\times 101_2$
$11010$
$+00000$
$11010$
$010000010_2$

$= 010000010_2$

2 a) $7043_8$
$-5030_8$
$2013_8$

$= 2013_8$

b) $\overset{0}{\not{7}}\overset{8}{\not{3}}\overset{7}{\not{8}}\overset{8+1}{1}_8$
$-3666_8$
$4513_8$

$= 4513_8$

Multiplication

c) $7405_8$
$\times 31_8$
$7405$
$+26417$
$273575_8$

$= 273575_8$

d) $4360_8$
$\times 55_8$
$+\,^{1}26260$
$26260$
$311060$

$= 311060_8$

3 a) $E488_{16}$
$-CE84_{16}$
$1604_{16}$

$= 1604_{16}$

b) $\overset{0}{\not{1}}\overset{17}{\not{1}}\overset{4}{5}\overset{15}{0}\overset{18}{2}_{16}$
$-329A_{16}$
$E268_{16}$

$= E268_{16}$

c) $B99E_{16}$

$\times \quad 3D_{16}$

$+96D06$

$22CDA$

$2C3AA6_{16}$

$= 2C3AA6_{16}$

d) $C21A_{16}$

$\times \quad A8_{16}$

$+610'D0$

$79504$

$7F6110_{16}$

$= 7F6110_{16}$

Bonus problem

$2ACE21_{16} \cdot 93BD2_{16}$

$2ACE21$

$\times 93BD2$

$559C42$

$22C77AD$

$+1D6DB6B$

$806A63$

$1813F29$

$18B3FC7B212_{16}$

$= 18B3FC7B212_{16}$