1. Completa la seguente tabella:

	Forma normale	Grado complessivo	Monomio simile
$2x^2(-3x^3)$	$\mathbf{-6x^5}$	$\mathbf{5}$	$\mathbf{x^5}$
$-4ab \cdot 2a\ (-b)$	$\mathbf{8a^2b^2}$	$\mathbf{4}$	$\mathbf{a^2b^2}$
$-(2ab)(-4a)\ b^3$	$\mathbf{8a^2b^4}$	$\mathbf{6}$	$\mathbf{a^2b^4}$
$\frac{3}{4}x^4y^3\left(-\frac{1}{2}\ x^6y\right)$	$\mathbf{-\frac{3}{8}x^{10}y^4}$	$\mathbf{14}$	$\mathbf{x^{10}y^4}$

2. Completa la seguente tabella:

A	$2A$	A^2	$-A^2$	$-\frac{1}{3}A$	A^3
$2ab$	$\mathbf{4ab}$	$\mathbf{4a^2b^2}$	$\mathbf{-4a^2b^2}$	$\mathbf{-\frac{2}{3}ab}$	$\mathbf{8\ a^3b^3}$
$\mathbf{9\ a^2b}$	$\mathbf{18\ a^2b}$	$\mathbf{81\ a^4b^2}$	$-81\ a^4b^2$	$\mathbf{-3a^2b}$	$\mathbf{9^3a^6b^3}$
$\mathbf{-5\ x^3y}$	$-10\ x^3y$	$\mathbf{25\ x^6y^2}$	$\mathbf{-25\ x^6y^2}$	$\mathbf{\frac{5}{3}x^3y}$	$\mathbf{-125\ x^9y^3}$
$\mathbf{-3\ a^4x}$	$\mathbf{-6\ a^4x}$	$\mathbf{9\ a^8x^2}$	$\mathbf{-9\ a^8x^2}$	$\mathbf{a^4x}$	$-27\ a^{12}x^3$

3. Calcola MCD e mcm dei seguenti gruppi di monomi:

	MCD	mcm
$-10\ x^3y^5; 2x^4y;\ -4x^2y^3$	$\mathbf{2\ x^2y}$	$\mathbf{20\ x^4y^5}$
$\frac{4}{3}a^{10}b^8c^6; 8\ a^4b^2; 12\ a^6b^6c^6$	$\mathbf{4\ a^4b^2}$	$\mathbf{24\ a^{10}b^8c^6}$
$0{,}2\ xy^2z^4;\ -2\ x^3y^2z^4; 0{,}5\ x^2y^2z^3$	$\mathbf{xy^2z^3}$	$\mathbf{2\ x^3y^2z^4}$

4. Calcola:

$$(-6a^2)\left(-\frac{1}{2}a\right) = \mathbf{3\ a^3} \qquad -\ a^2(-b^2)\ ab^2\ (-a^2b) = \mathbf{-a^5b^5} \qquad a^{6n}a^2a^n = \mathbf{a^{7n+2}}$$

$$-\frac{3}{7}x^5y^8z^8 : \left(-\frac{1}{14}\ x^5y^6z^6\right) = \mathbf{6y^2z^2} \qquad 2a^3b^4 : (-3a^2b) = \mathbf{-\frac{2}{3}ab^3} \qquad \frac{4}{3}a^{n+1}b^{2n+2} : \left(\frac{16}{3}\ a^nb^2\right) = \mathbf{\frac{1}{4}ab^{2n}}$$

$$-(-0{,}2\ a^2b)^3 = \mathbf{0{,}008\ a^6b^3} \qquad \left[-\frac{1}{2}\ (-2a^2)^2\right]^3 = \left[-\frac{1}{2}\ (4a^4)\right]^3 = (-2a^4)^3 = \mathbf{-8\ a^{12}} \qquad [(-2xy^2)^2]^3 = \mathbf{64\ x^6y^{12}}$$

$$\left\{\left[\left(\frac{3}{5}\ xy\right)^2 : \left(\frac{3}{5}x\right)\right]^3 : \left(\frac{3}{5}x\right)^2\right\} : \left(\frac{3}{5}y^2\right) = \left\{\left[\left(\frac{3}{5}\right)^2 x^2y^2 : \left(\frac{3}{5}x\right)\right]^3 : \left(\frac{3}{5}x\right)^2\right\} : \left(\frac{3}{5}y^2\right) = \left\{\left[\frac{3}{5}xy^2\right]^3 : \left(\frac{3}{5}x\right)^2\right\} : \left(\frac{3}{5}y^2\right) =$$

$$= \left\{\left(\frac{3}{5}\right)^3 x^3y^6 : \left[\left(\frac{3}{5}\right)^2 x^2\right]\right\} : \left(\frac{3}{5}y^2\right) = \left(\frac{3}{5}xy^6\right) : \left(\frac{3}{5}y^2\right) = \mathbf{xy^4}$$