

ANALISI MATEMATICA B - 25 agosto 2008 - C.d.L.: AMBL-CIVL Il numero del compito corrisponde all'ascissa del vertice della parabola che compare nell'esercizio 8: ad esempio se la parabola ha vertice in $(4, 0)$, il compito è il numero 4.

COMPITO 1

1. $\frac{\pi+2}{16}$
 2. $\left(\frac{x^2}{2} + \frac{3}{2}x - \frac{3}{4}\right) e^{2x} + \frac{3}{4}$
 3. $\begin{pmatrix} 0 & 4\sqrt{2} \\ 1 & 1 \end{pmatrix}$
 4. $0 < \alpha \leq \frac{\pi}{2\sqrt{2}}$
 5. $m = 0$ assunto su $\{(x, y) \in C : x = y^2\}$, $M = \left(\frac{9}{4}\right)^2$ assunto in $\left(-\frac{1}{2}, \pm\sqrt{\frac{7}{4}}\right)$
 6. $x - y - 8z = 0$
 7. $2e$
 8. $\frac{\sin 1 + \cos 1 - 1}{2}$
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COMPITO 2

1. $\frac{\pi+2}{24}$
 2. $\left(\frac{x^2}{2} + \frac{5}{2}x - \frac{5}{4}\right) e^{2x} + \frac{5}{4}$
 3. $\begin{pmatrix} 0 & 6\sqrt{2} \\ 1 & 1 \end{pmatrix}$
 4. $0 < \alpha \leq \frac{\pi}{2\sqrt{2}}$
 5. $m = 0$ assunto su $\{(x, y) \in C : x = y^2\}$, $M = \left(\frac{13}{4}\right)^2$ assunto in $\left(-\frac{1}{2}, \pm\sqrt{\frac{11}{4}}\right)$
 6. $x - y - 7z = 0$
 7. $3e$
 8. $\frac{4\sin 4 + \cos 4 - 1}{2}$
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COMPITO 3

1. $\frac{\pi+2}{32}$
2. $\left(\frac{x^2}{2} + \frac{7}{2}x - \frac{7}{4}\right) e^{2x} + \frac{7}{4}$
3. $\begin{pmatrix} 0 & 8\sqrt{2} \\ 1 & 1 \end{pmatrix}$
4. $0 < \alpha \leq \frac{\pi}{2\sqrt{2}}$

5. $m = 0$ assunto su $\{(x, y) \in C : x = y^2\}$, $M = \left(\frac{17}{4}\right)^2$ assunto in $\left(-\frac{1}{2}, \pm\sqrt{\frac{15}{4}}\right)$
 6. $x - y - 6z = 0$
 7. $4e$
 8. $\frac{9 \sin 9 + \cos 9 - 1}{2}$
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COMPITO 4

1. $\frac{\pi+2}{40}$
 2. $\left(\frac{x^2}{2} + \frac{9}{2}x - \frac{9}{4}\right) e^{2x} + \frac{9}{4}$
 3. $\begin{pmatrix} 0 & 10\sqrt{2} \\ 1 & 1 \end{pmatrix}$
 4. $0 < \alpha \leq \frac{\pi}{2\sqrt{2}}$
 5. $m = 0$ assunto su $\{(x, y) \in C : x = y^2\}$, $M = \left(\frac{21}{4}\right)^2$ assunto in $\left(-\frac{1}{2}, \pm\sqrt{\frac{19}{4}}\right)$
 6. $x - y - 5z = 0$
 7. $5e$
 8. $\frac{16 \sin 16 + \cos 16 - 1}{2}$
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COMPITO 5

1. $\frac{\pi+2}{48}$
 2. $\left(\frac{x^2}{2} + \frac{11}{2}x - \frac{11}{4}\right) e^{2x} + \frac{11}{4}$
 3. $\begin{pmatrix} 0 & 12\sqrt{2} \\ 1 & 1 \end{pmatrix}$
 4. $0 < \alpha \leq \frac{\pi}{2\sqrt{2}}$
 5. $m = 0$ assunto su $\{(x, y) \in C : x = y^2\}$, $M = \left(\frac{25}{4}\right)^2$ assunto in $\left(-\frac{1}{2}, \pm\sqrt{\frac{23}{4}}\right)$
 6. $x - y - 4z = 0$
 7. $6e$
 8. $\frac{25 \sin 25 + \cos 25 - 1}{2}$
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COMPITO 6

1. $\frac{\pi+2}{56}$
2. $\left(\frac{x^2}{2} + \frac{13}{2}x - \frac{13}{4}\right) e^{2x} + \frac{13}{4}$
3. $\begin{pmatrix} 0 & 14\sqrt{2} \\ 1 & 1 \end{pmatrix}$

4. $0 < \alpha \leq \frac{\pi}{2\sqrt{2}}$

5. $m = 0$ assunto su $\{(x, y) \in C : x = y^2\}$, $M = \left(\frac{29}{4}\right)^2$ assunto in $\left(-\frac{1}{2}, \pm\sqrt{\frac{27}{4}}\right)$

6. $x - y - 3z = 0$

7. $7e$

8. $\frac{36 \sin 36 + \cos 36 - 1}{2}$
