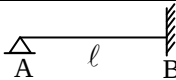
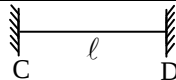
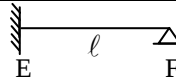
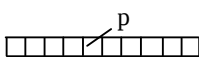
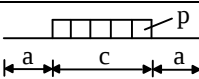
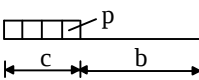
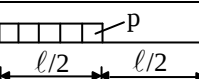
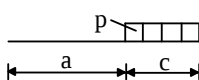
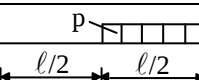
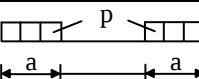
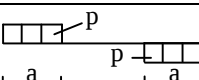
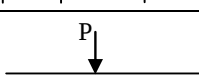
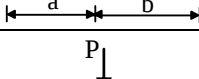
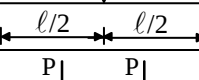
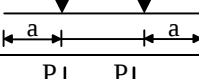
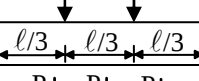
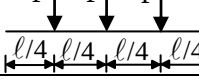
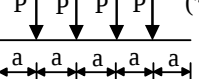
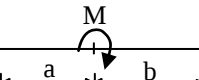
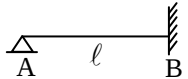
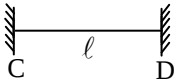
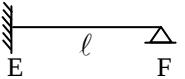
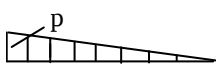
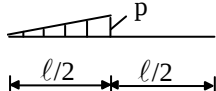
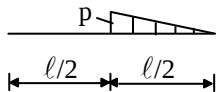
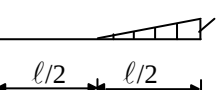
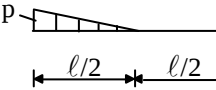
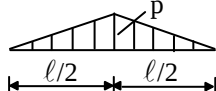
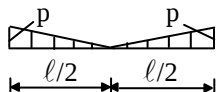
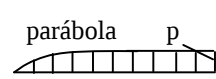
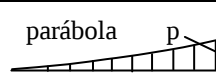
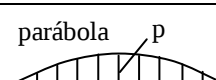
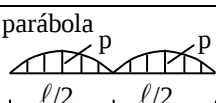
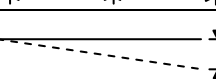
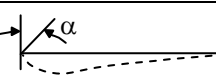
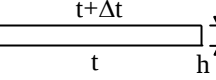


TABELA 3.2a					
MOMENTOS DE ENGASTAMENTO PERFEITO					
CARREGAMENTO					
		M_{BA}	M_{CD}	M_{DC}	M_{EF}
1		$-\frac{p\ell^2}{8}$	$\frac{p\ell^2}{12}$	$-\frac{p\ell^2}{12}$	$\frac{p\ell^2}{8}$
2		$-\frac{pc}{16\ell}(3\ell^2 - c^2)$	$\frac{pc}{24\ell}(3\ell^2 - c^2)$	$-\frac{pc}{24\ell}(3\ell^2 - c^2)$	$\frac{pc}{16\ell}(3\ell^2 - c^2)$
3		$-\frac{pc^2}{8\ell^2}(2\ell^2 - c^2)$	$\frac{pc^2}{12\ell^2}(6b^2 + 4bc + c^2)$	$-\frac{pc^2}{12\ell^2}(4bc + c^2)$	$\frac{pc^2}{8\ell^2}(\ell + b)^2$
4		$-\frac{7}{128}p\ell^2$	$\frac{11}{192}p\ell^2$	$-\frac{5}{192}p\ell^2$	$\frac{9}{128}p\ell^2$
5		$-\frac{pc^2}{8\ell^2}(\ell + a)^2$	$\frac{pc^2}{12\ell^2}(4ac + c^2)$	$-\frac{pc^2}{12\ell^2}(6a^2 + 4ac + c^2)$	$\frac{pc^2}{8\ell^2}(2\ell^2 - c^2)$
6		$-\frac{9}{128}p\ell^2$	$\frac{5}{192}p\ell^2$	$-\frac{11}{192}p\ell^2$	$\frac{7}{128}p\ell^2$
7		$-\frac{pa^2}{4\ell}(3\ell - 2a)$	$\frac{pa^2}{6\ell}(3\ell - 2a)$	$-\frac{pa^2}{6\ell}(3\ell - 2a)$	$\frac{pa^2}{4\ell}(3\ell - 2a)$
8		$-\frac{pa^2}{4\ell}(3\ell - 2a)$	$\frac{pa^2}{2\ell^2}(\ell - a)^2$	$-\frac{pa^2}{2\ell^2}(\ell - a)^2$	$\frac{pa^2}{4\ell}(3\ell - 2a)$
9		$-\frac{Pab}{2\ell^2}(\ell + a)$	$\frac{Pab^2}{\ell^2}$	$-\frac{Pa^2b}{\ell^2}$	$\frac{Pab}{2\ell^2}(\ell + b)$
10		$-\frac{3P\ell}{16}$	$\frac{P\ell}{8}$	$-\frac{P\ell}{8}$	$\frac{3P\ell}{16}$
11		$-\frac{3Pa}{2\ell}(\ell - a)$	$\frac{Pa}{\ell}(\ell - a)$	$-\frac{Pa}{\ell}(\ell - a)$	$\frac{3Pa}{2\ell}(\ell - a)$
12		$-\frac{P\ell}{3}$	$\frac{2P\ell}{9}$	$-\frac{2P\ell}{9}$	$\frac{P\ell}{3}$
13		$-\frac{15P\ell}{32}$	$\frac{5P\ell}{16}$	$-\frac{5P\ell}{16}$	$\frac{15P\ell}{32}$
14		$-\frac{P\ell}{8n}(n^2 - 1)$	$\frac{P\ell}{12n}(n^2 - 1)$	$-\frac{P\ell}{12n}(n^2 - 1)$	$\frac{P\ell}{8n}(n^2 - 1)$
15		$-\frac{M}{2\ell^2}(\ell^2 - 3a^2)$	$\frac{Mb}{\ell^2}(3b - 2\ell)$	$-\frac{Ma}{\ell^2}(2\ell - 3a)$	$\frac{M}{2\ell^2}(3b^2 - \ell^2)$
16		$-\frac{P\ell}{16n}(2n^2 + 1)$	$\frac{P\ell}{24n}(2n^2 + 1)$	$-\frac{P\ell}{24n}(2n^2 + 1)$	$\frac{P\ell}{16n}(2n^2 + 1)$
Extraída de SOUZA; ANTUNES (1983), JIMENES MONTOYA; GARCIA MESEGUER; MORAN CABRE (1973) e de SCHREYER (1965). Convenção de GRINTER. Revista e adaptada por Libânio M. Pinheiro, Bruna Catoia e Thiago Catoia.					

(*) $n = \ell / a$

TABELA 3.2b					
MOMENTOS DE ENGASTAMENTO PERFEITO					
CARREGAMENTO					
		M_{BA}	M_{CD}	M_{DC}	M_{EF}
17		$-\frac{p\ell^2}{15}$	$\frac{p\ell^2}{30}$	$-\frac{p\ell^2}{20}$	$\frac{7p\ell^2}{120}$
18		$-\frac{7p\ell^2}{120}$	$\frac{p\ell^2}{20}$	$-\frac{p\ell^2}{30}$	$\frac{p\ell^2}{15}$
19		$-\frac{17}{480}p\ell^2$	$\frac{p\ell^2}{30}$	$-\frac{3}{160}p\ell^2$	$\frac{41}{960}p\ell^2$
20		$-\frac{41}{960}p\ell^2$	$\frac{3}{160}p\ell^2$	$-\frac{p\ell^2}{30}$	$\frac{17}{480}p\ell^2$
21		$-\frac{53}{1920}p\ell^2$	$\frac{7}{960}p\ell^2$	$-\frac{23}{960}p\ell^2$	$\frac{37}{1920}p\ell^2$
22		$-\frac{37}{1920}p\ell^2$	$\frac{23}{960}p\ell^2$	$-\frac{7}{960}p\ell^2$	$\frac{53}{1920}p\ell^2$
23		$-\frac{5}{64}p\ell^2$	$\frac{5}{96}p\ell^2$	$-\frac{5}{96}p\ell^2$	$\frac{5}{64}p\ell^2$
24		$-\frac{3}{64}p\ell^2$	$\frac{p\ell^2}{32}$	$-\frac{p\ell^2}{32}$	$\frac{3}{64}p\ell^2$
25		$-\frac{11}{120}p\ell^2$	$\frac{p\ell^2}{20}$	$-\frac{p\ell^2}{15}$	$\frac{p\ell^2}{12}$
26		$-\frac{p\ell^2}{24}$	$\frac{p\ell^2}{60}$	$-\frac{p\ell^2}{30}$	$\frac{p\ell^2}{30}$
27		$-\frac{p\ell^2}{10}$	$\frac{p\ell^2}{15}$	$-\frac{p\ell^2}{15}$	$\frac{p\ell^2}{10}$
28		$-\frac{7}{80}p\ell^2$	$\frac{7}{120}p\ell^2$	$-\frac{7}{120}p\ell^2$	$\frac{7}{80}p\ell^2$
29		$+\frac{3a}{\ell^2}EI$	$+\frac{6a}{\ell^2}EI$	$+\frac{6a}{\ell^2}EI$	$+\frac{3a}{\ell^2}EI$
30		$+\frac{3\alpha}{\ell}EI$	$+\frac{2\alpha}{\ell}EI$	$+\frac{4\alpha}{\ell}EI$	---
31		---	$-\frac{4\alpha}{\ell}EI$	$-\frac{2\alpha}{\ell}EI$	$-\frac{3\alpha}{\ell}EI$
32		$+\frac{3EI}{2h}\alpha_t\Delta t$	$-\frac{EI}{h}\alpha_t\Delta t$	$+\frac{EI}{h}\alpha_t\Delta t$	$-\frac{3EI}{2h}\alpha_t\Delta t$
Extraída de SOUZA; ANTUNES (1983), JIMENES MONTOYA; GARCIA MESEGUER; MORAN CABRE (1973) e de SCHREYER (1965). Convenção de GRINTER. Revista e adaptada por Libânio M. Pinheiro, Bruna Catoia e Thiago Catoia.					