



Backpack % of Body Weight

40	66.7%	61.5%	57.1%	53.3%	50.0%	47.1%	44.4%	42.1%	40.0%	38.1%	36.4%	34.8%	33.3%	32.0%	30.8%	29.6%	28.6%	27.6%	26.7%	25.8%	25.0%	24.2%	23.5%	22.9%	22.2%	21.6%	21.1%	20.5%	20.0%	19.5%	19.0%	18.6%	18.2%	17.8%
39	65.0%	60.0%	55.7%	52.0%	48.8%	45.9%	43.3%	41.1%	39.0%	37.1%	35.5%	33.9%	32.5%	31.2%	30.0%	28.9%	27.9%	26.9%	26.0%	25.2%	24.4%	23.6%	22.9%	22.3%	21.7%	21.1%	20.5%	20.0%	19.5%	19.0%	18.6%	18.1%	17.7%	17.3%
38	63.3%	58.5%	54.3%	50.7%	47.5%	44.7%	42.2%	40.0%	38.0%	36.2%	34.5%	33.0%	31.7%	30.4%	29.2%	28.1%	27.1%	26.2%	25.3%	24.5%	23.8%	23.0%	22.4%	21.7%	21.1%	20.5%	20.0%	19.5%	19.0%	18.5%	18.1%	17.7%	17.3%	16.9%
37	61.7%	56.9%	52.9%	49.3%	46.3%	43.5%	41.1%	38.9%	37.0%	35.2%	33.6%	32.2%	30.8%	29.6%	28.5%	27.4%	26.4%	25.5%	24.7%	23.9%	23.1%	22.4%	21.8%	21.1%	20.6%	20.0%	19.5%	19.0%	18.5%	18.0%	17.6%	17.2%	16.8%	16.4%
36	60.0%	55.4%	51.4%	48.0%	45.0%	42.4%	40.0%	37.9%	36.0%	34.3%	32.7%	31.3%	30.0%	28.8%	27.7%	26.7%	25.7%	24.8%	24.0%	23.2%	22.5%	21.8%	21.2%	20.6%	20.0%	19.5%	18.9%	18.5%	18.0%	17.6%	17.1%	16.7%	16.4%	16.0%
35	58.3%	53.8%	50.0%	46.7%	43.8%	41.2%	38.9%	36.8%	35.0%	33.3%	31.8%	30.4%	29.2%	28.0%	26.9%	25.9%	25.0%	24.1%	23.3%	22.6%	21.9%	21.2%	20.6%	20.0%	19.4%	18.9%	18.4%	17.9%	17.5%	17.1%	16.7%	16.3%	15.9%	15.6%
34	56.7%	52.3%	48.6%	45.3%	42.5%	40.0%	37.8%	35.8%	34.0%	32.4%	30.9%	29.6%	28.3%	27.2%	26.2%	25.2%	24.3%	23.4%	22.7%	21.9%	21.3%	20.6%	20.0%	19.4%	18.9%	18.4%	17.9%	17.4%	17.0%	16.6%	16.2%	15.8%	15.5%	15.1%
33	55.0%	50.8%	47.1%	44.0%	41.3%	38.8%	36.7%	34.7%	33.0%	31.4%	30.0%	28.7%	27.5%	26.4%	25.4%	24.4%	23.6%	22.8%	22.0%	21.3%	20.6%	20.0%	19.4%	18.9%	18.3%	17.8%	17.4%	16.9%	16.5%	16.1%	15.7%	15.3%	15.0%	14.7%
32	53.3%	49.2%	45.7%	42.7%	40.0%	37.6%	35.6%	33.7%	32.0%	30.5%	29.1%	27.8%	26.7%	25.6%	24.6%	23.7%	22.9%	22.1%	21.3%	20.6%	20.0%	19.4%	18.8%	18.3%	17.8%	17.3%	16.8%	16.4%	16.0%	15.6%	15.2%	14.9%	14.5%	14.2%
31	51.7%	47.7%	44.3%	41.3%	38.8%	36.5%	34.4%	32.6%	31.0%	29.5%	28.2%	27.0%	25.8%	24.8%	23.8%	23.0%	22.1%	21.4%	20.7%	20.0%	19.4%	18.8%	18.2%	17.7%	17.2%	16.8%	16.3%	15.9%	15.5%	15.1%	14.8%	14.4%	14.1%	13.8%
30	50.0%	46.2%	42.9%	40.0%	37.5%	35.3%	33.3%	31.6%	30.0%	28.6%	27.3%	26.1%	25.0%	24.0%	23.1%	22.2%	21.4%	20.7%	20.0%	19.4%	18.8%	18.2%	17.6%	17.1%	16.7%	16.2%	15.8%	15.4%	15.0%	14.6%	14.3%	14.0%	13.6%	13.3%
29	48.3%	44.6%	41.4%	38.7%	36.3%	34.1%	32.2%	30.5%	29.0%	27.6%	26.4%	25.2%	24.2%	23.2%	22.3%	21.5%	20.7%	20.0%	19.3%	18.7%	18.1%	17.6%	17.1%	16.6%	16.1%	15.7%	15.3%	14.9%	14.5%	14.1%	13.8%	13.5%	13.2%	12.9%
28	46.7%	43.1%	40.0%	37.3%	35.0%	32.9%	31.1%	29.5%	28.0%	26.7%	25.5%	24.3%	23.3%	22.4%	21.5%	20.7%	20.0%	19.3%	18.7%	18.1%	17.5%	17.0%	16.5%	16.0%	15.6%	15.1%	14.7%	14.4%	14.0%	13.7%	13.3%	13.0%	12.7%	12.4%
27	45.0%	41.5%	38.6%	36.0%	33.8%	31.8%	30.0%	28.4%	27.0%	25.7%	24.5%	23.5%	22.5%	21.6%	20.8%	20.0%	19.3%	18.6%	18.0%	17.4%	16.9%	16.4%	15.9%	15.4%	15.0%	14.6%	14.2%	13.8%	13.5%	13.2%	12.9%	12.6%	12.3%	12.0%
26	43.3%	40.0%	37.1%	34.7%	32.5%	30.6%	28.9%	27.4%	26.0%	24.8%	23.6%	22.6%	21.7%	20.8%	20.0%	19.3%	18.6%	17.9%	17.3%	16.8%	16.3%	15.8%	15.3%	14.9%	14.4%	14.1%	13.7%	13.3%	13.0%	12.7%	12.4%	12.1%	11.8%	11.6%
25	41.7%	38.5%	35.7%	33.3%	31.3%	29.4%	27.8%	26.3%	25.0%	23.8%	22.7%	21.7%	20.8%	20.0%	19.2%	18.5%	17.9%	17.2%	16.7%	16.1%	15.6%	15.2%	14.7%	14.3%	13.9%	13.5%	13.2%	12.8%	12.5%	12.2%	11.9%	11.6%	11.4%	11.1%
24	40.0%	36.9%	34.3%	32.0%	30.0%	28.2%	26.7%	25.3%	24.0%	22.9%	21.8%	20.9%	20.0%	19.2%	18.5%	17.8%	17.1%	16.6%	16.0%	15.5%	15.0%	14.5%	14.1%	13.7%	13.3%	13.0%	12.6%	12.3%	12.0%	11.7%	11.4%	11.2%	10.9%	10.7%
23	38.3%	35.4%	32.9%	30.7%	28.8%	27.1%	25.6%	24.2%	23.0%	21.9%	20.9%	20.0%	19.2%	18.4%	17.7%	17.0%	16.4%	15.9%	15.3%	14.8%	14.4%	13.9%	13.5%	13.1%	12.8%	12.4%	12.1%	11.8%	11.5%	11.2%	11.0%	10.7%	10.5%	10.2%
22	36.7%	33.8%	31.4%	29.3%	27.5%	25.9%	24.4%	23.2%	22.0%	21.0%	20.0%	19.1%	18.3%	17.6%	16.9%	16.3%	15.7%	15.2%	14.7%	14.2%	13.8%	13.3%	12.9%	12.6%	12.2%	11.9%	11.6%	11.3%	11.0%	10.7%	10.5%	10.2%	10.0%	9.8%
21	35.0%	32.3%	30.0%	28.0%	26.3%	24.7%	23.3%	22.1%	21.0%	20.0%	19.1%	18.3%	17.5%	16.8%	16.2%	15.6%	15.0%	14.5%	14.0%	13.5%	13.1%	12.7%	12.4%	12.0%	11.7%	11.4%	11.1%	10.8%	10.5%	10.2%	10.0%	9.8%	9.5%	9.3%
20	33.3%	30.8%	28.6%	26.7%	25.0%	23.5%	22.2%	21.1%	20.0%	19.0%	18.2%	17.4%	16.7%	16.0%	15.4%	14.8%	14.3%	13.8%	13.3%	12.9%	12.5%	12.1%	11.8%	11.4%	11.1%	10.8%	10.5%	10.3%	10.0%	9.8%	9.5%	9.3%	9.1%	8.9%
19	31.7%	29.2%	27.1%	25.3%	23.8%	22.4%	21.1%	20.0%	19.0%	18.1%	17.3%	16.5%	15.8%	15.2%	14.6%	14.1%	13.6%	13.1%	12.7%	12.3%	11.9%	11.5%	11.2%	10.9%	10.6%	10.3%	10.0%	9.7%	9.5%	9.3%	9.0%	8.8%	8.6%	8.4%
18	30.0%	27.7%	25.7%	24.0%	22.5%	21.2%	20.0%	18.9%	18.0%	17.1%	16.4%	15.7%	15.0%	14.4%	13.8%	13.3%	12.9%	12.4%	12.0%	11.6%	11.3%	10.9%	10.6%	10.3%	10.0%	9.7%	9.5%	9.2%	9.0%	8.8%	8.6%	8.4%	8.2%	8.0%
17	28.3%	26.2%	24.3%	22.7%	21.3%	20.0%	18.9%	17.9%	17.0%	16.2%	15.5%	14.8%	14.2%	13.6%	13.1%	12.6%	12.1%	11.7%	11.3%	11.0%	10.6%	10.3%	10.0%	9.7%	9.4%	9.2%	8.9%	8.7%	8.5%	8.3%	8.1%	7.9%	7.7%	7.6%
16	26.7%	24.6%	22.9%		20.0%	18.8%	17.8%	16.8%	16.0%	15.2%	14.5%	13.9%	13.3%	12.8%	12.3%	11.9%	11.4%	11.0%	10.7%	10.3%	10.0%	9.7%	9.4%	9.1%	8.9%	8.6%	8.4%	8.2%	8.0%	7.8%	7.6%	7.4%	7.3%	7.1%
-	25.0%				-									12.0%							9.4%	9.1%	8.8%	8.6%	8.3%	8.1%	7.9%	7.7%	7.5%	7.3%	7.1%	7.0%	6.8%	6.7%
	23.3%						15.6%	14.7%			12.7%			11.2%			10.0%	9.7%	9.3%	9.0%	8.8%	8.5%		8.0%	7.8%	7.6%	7.4%	7.2%	7.0%	6.8%	6.7%	6.5%	 	6.2%
-	21.7%					15.3%	14.4%	13.7%		12.4%			10.8%	10.4%		9.6%	9.3%	9.0%	8.7%	8.4%	8.1%	7.9%	7.6%	7.4%	7.2%	7.0%	6.8%	6.7%	6.5%	6.3%	6.2%	6.0%	5.9%	5.8%
	20.0%					14.1%	13.3%	12.6%		11.4%		10.4%	10.0%		9.2%	8.9%	8.6%	8.3%	8.0%	7.7%	7.5%	7.3%	7.1%	6.9%	6.7%	6.5%	6.3%	6.2%	6.0%	5.9%	5.7%	5.6%	5.5%	5.3%
-	18.3%		_				12.2%	11.6%		10.5%		9.6%	9.2%	_	8.5%	8.1%	7.9%	7.6%	7.3%	7.1%	6.9%	6.7%	6.5%	6.3%	6.1%	5.9%	5.8%	5.6%	5.5%	5.4%	5.2%	5.1%	 	
10			14.3%	13.3%	12.5%	11.8%	11.1%	10.5%	10.0%	9.5%	9.1%	8.7%	8.3%		7.7%	7.4%	7.1%	6.9%	6.7%	6.5%	6.3%	6.1%	5.9%	5.7%	5.6%	5.4%	5.3%	5.1%	5.0%	4.9%	4.8%	4.7%	4.5%	
	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225

Body Weight