3, solution 8.38 (ASTAM, 11/24, Q.1):
(a) (iii) **-**7.3243×10^{-5}.

4, solution 6.60:
Posterior distribution of θ is proportional to: $\pi(\theta)$ f(11) = $150/(\mathbf{11} + \theta)^4$, $5 < \theta < \infty$.

$$\int_5^\infty \frac{150}{(11+\theta)^4} d\theta = -50/(11+\theta)^3 \Big]_{\theta=5}^{\theta=\infty} = 25/2048.$$

Posterior density of θ is: $\{150/(\mathbf{11} + \theta)^4\}$ / (25/2048) = $12{,}288/(\mathbf{11} + \theta)^4$, $5 < \theta < \infty$.
The posterior probability that θ exceeds 10 is:

$$\int_{10}^\infty \frac{12{,}228}{(11+\theta)^4} d\theta = -4096/(11+\theta)^3 \Big]_{\theta=10}^{\theta=\infty} = 4096/21^3 = 0.442.$$

8, p.109: Using a threshold of 20,000 a Generalized Pareto Distribution was fit via maximum likelihood to the truncated and shifted data:

	Fitted Value	Standard Error
ξ	0.75	**0.41**
β ($million)	**7005**	3066

Using instead a threshold of 21,000 another Generalized Pareto Distribution was fit via maximum likelihood to the truncated and shifted data:

	Fitted Value	Standard Error
ξ	1.2	**0.53**
β ($million)	**3850**	1960