

- 12 A retailer sells bags of flour which are advertised as containing 1.5 kg of flour. A trading standards officer is investigating whether there is enough flour in each bag. He collects a random sample and uses software to carry out a hypothesis test at the 5% level. The analysis is shown in the software printout below.

Distribution	Statistics
Z Test of a Mean	
Null Hypothesis $\mu =$ 1.5	
Alternative Hypothesis <input checked="" type="radio"/> < <input type="radio"/> > <input type="radio"/> $\neq$	
Sample	
Mean	1.44
$\sigma$	0.24
N	32
Z Test of a Mean	
Mean	1.44
$\sigma$	0.24
SE	0.0424
N	32
Z	-1.4142
P	0.0786

- (a) State the hypotheses the officer uses in the test, defining any parameters used. [2]
- (b) State the distribution used in the analysis. [3]
- (c) Carry out the hypothesis test, giving your conclusion in context. [3]