

1(a)	force per unit mass
1(b)(i)	radial
	towards (centre of) planet
1(b)(ii)	(changes in) height (very) much smaller than radius
	$(\text{radius} + \text{height})^2 \approx \text{radius}^2$ or field lines are approximately parallel
1(c)(i)	$9.81 \times R^2 = 3.99 \times 10^{14}$
	$R = 6.38 \times 10^6 \text{ m}$
1(c)(ii)	gravitational potential $= - (GM / R)$
	$= - (3.99 \times 10^{14}) / (6.38 \times 10^6)$
	$= - 6.25 \times 10^7 \text{ J kg}^{-1}$
1(d)	potential (energy) zero at infinite separation
	(gravitational) force is attractive