17 On a planet, a gravitational force F acts on a mass of 6.0 kg. The mass is moved by force F a distance of 30 m in the direction of the gravitational field. The work done by the field is 450 J.

What is the force F on the mass and what is the acceleration of free fall g on the planet?

	F/N	g/ms^{-2}
A	0.067	0.011
B	0.067	0.40
C	15	2.5
D	15	90

18 A girl of mass 50 kg runs up a flight of 20 steps in 7.0 seconds. Each step is 25 cm high.