

- 19** A water pump is driven by an engine. The pump raises a volume of  $0.50\text{ m}^3$  of water in 1.0 minute from a depth of 30 m. The pump has an efficiency of 70%.

The density of water is  $1000\text{ kg m}^{-3}$ .

What is the useful output power from the engine?

**A** 2.5 kW

**B** 3.5 kW

**C** 150 kW

**D** 210 kW