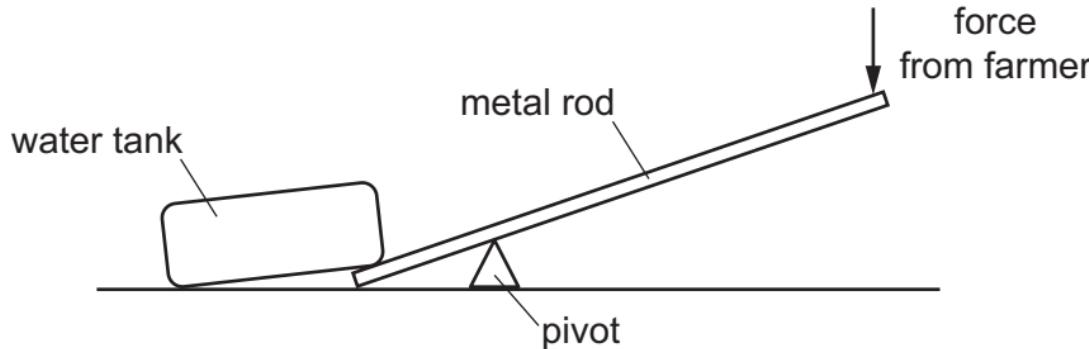


12 A farmer is trying to lift the corner of a large water tank. She uses a metal rod as a lever.



The vertical force from the farmer is constant and is always applied to the end of the rod.

Which change **must** increase the upward force on the water tank?

- A using a longer rod and moving the pivot closer to the tank
- B using a longer rod and moving the pivot further away from the tank
- C using a shorter rod and moving the pivot closer to the tank
- D using a shorter rod and moving the pivot further away from the tank

13 The diagram shows a ball falling. Which pair of forces acts on the ball?