A bulldog on a skateboard is sitting at the bottom of a 2 m dip. How much KE do you have to give them so they will roll out of the dip? The bulldog and skateboard combined have a mass of 20 kg. Friction and air drag can be ignored.

1. None
2. About 400 Joules
3. About 600 Joules
4. You can’t tell from the information given.

Try this!

\[ \Delta \left( \frac{1}{2}mv^2 + U \right) = 0 \]
A bulldog on a skateboard is sitting at the bottom of a 2 m dip. What is their total mechanical energy? The bulldog and skateboard combined have a mass of 20 kg. Friction and air drag can be ignored.

1. Zero
2. About 400 Joules
3. About 200 Joules
4. You can’t tell from the information given.

Try this!

\[ ME = \left( \frac{1}{2} m v^2 + U \right) \]
A bulldog on a skateboard is sitting at the bottom of a 2 m dip. How much KE do you have to give them so they will roll out of the dip? The bulldog and skateboard combined have a mass of 20 kg. Friction and air drag can be ignored.

1. None
2. About 400 Joules
3. About 600 Joules
4. You can’t tell from the information given.

Try this!

$$\Delta \left( \frac{1}{2}mv^2 + U \right) = 0$$
A bulldog on a skateboard is sitting at the bottom of a 2 m dip. What is their total mechanical energy? The bulldog and skateboard combined have a mass of 20 kg. Friction and air drag can be ignored.

1. Zero
2. About 400 Joules
3. About -400 Joules
4. You can’t tell from the information given.