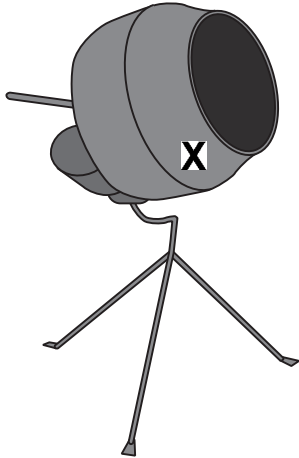
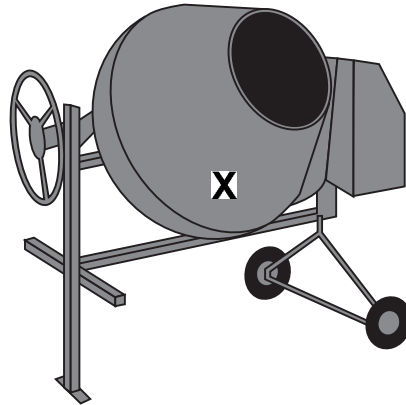


4 The diagrams show two concrete mixers.



Concrete mixer **A**



Concrete mixer **B**

On each diagram, the centre of the white **X** marks the centre of mass of the concrete mixer and its contents.

4 (a) Complete the sentence to explain what the term *centre of mass* means.

The centre of mass of a concrete mixer and its contents is

.....

.....

(1 mark)

4 (b) Both diagrams are drawn to the same scale.

Concrete mixer **B** is more stable than concrete mixer **A**.

The two features which make concrete mixer **B** more stable are:

- 1
-
- 2
-

(2 marks)



4 (c) Use the terms 'line of action of the weight' and 'resultant moment' to explain why a stable concrete mixer does not fall over when it is given a small push.

.....

.....

.....

.....

.....

(2 marks)

5

Turn over for the next question

Turn over ►

