

# **m3 = only 1 day to go!**

28 A girl runs 8 laps of a track in an average time of 48.2 seconds per lap.

After completing another 2 laps her overall average time is 49.4 seconds per lap.

Calculate her average time per lap for the last 2 laps.

Answer \_\_\_\_\_ seconds per lap [3]

18 (a) A circular garden has a radius of 7 metres.

Calculate the area of the garden.

Answer \_\_\_\_\_ [3]

(b) The perimeter of a different garden is 64 metres, measured to the nearest metre.

Write down the greatest value and least value of the perimeter.

Answer greatest \_\_\_\_\_ m

least \_\_\_\_\_ m [2]

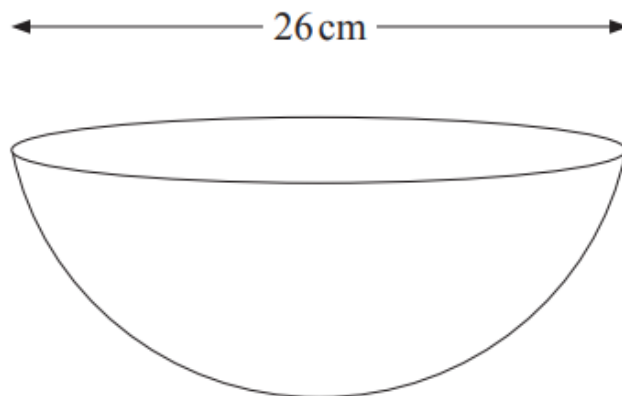
22 Solve the equation  $\frac{3(x-2)}{4} - 3 = \frac{x+4}{3}$

Show all your working clearly.

**A solution by trial and improvement will not be accepted.**

Answer  $x =$  \_\_\_\_\_ [4]

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The diagram above shows a **solid** hemisphere which has a diameter of 26 cm.

Find the total surface area of the solid hemisphere.

Give your answer in terms of  $\pi$ .

Answer \_\_\_\_\_  $\text{cm}^2$  [3]