22. Simplify each of these surds:

    a. $\sqrt{32}$ b). $\sqrt{75}$ c. $\sqrt{90}$ d. $\sqrt{72}$ e. $\sqrt{27}$
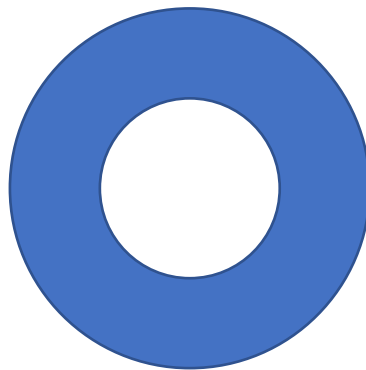
23. A circle has an area of 442cm^2. Calculate its radius correct to one decimal place.

24. `A poppy seed weighs approximately 3×10^{-4} grams.
    How many poppy seeds are in 20kg? Give your answer in scientific notation.

25. In the diagram below, the radius of the smaller circle is exactly half the radius of
    the larger circle. The diameter of the larger circle is 40cm.
    Write down the radius of each circle and calculate the shaded area.

26. In a 15% off sale, a pair of trainers cost £102.
    Work out the full price of the trainers before the discount.

27. House prices increase at the rate of 3% per year for each of the next 4 years.
    If the current price of a house if £120 000, how much will it cost in 4 after
    this time?

28. The weights of six boxes (in kg) are shown below.
            22   14   18.   16.   24.   20

 a) Calculate the mean and standard deviation of the weights.
 b) Another set of 6 boxes were weighed. Their mean weight was 21.5kg and
    the standard deviation was 3.22.
    Make 2 valid comments about each set of boxes.