

National 5

Short Task 21

Round all answers to an appropriate degree of accuracy unless specifically stated

1. Evaluate

$$2\frac{2}{5} \div 1\frac{3}{8}$$

2. After renovation, a football club's capacity is now 68 000. This is an 12% increase on their old stadium.

What was the capacity of the club's stadium before the renovation?

Give your answer to the nearest 100.

3. Change the subject of the formula below to Q

$$P = \sqrt{5Q + r}$$

4. Write without brackets and simplify

$$(x - 5)(2x - 3)(x + 2)$$

5. The volume of a sphere is known to be $75,400\text{cm}^3$
Calculate its radius, correct to 3 significant figures.

$$[\text{Volume of sphere} = \frac{4}{3}\pi r^3]$$

6. The population of a town is expected to increase at a rate of 4.3% per year for the next 3 years. The population today is estimated at 94 200.
- a. Calculate the estimated population of the town in 3 years **to the nearest 100**.
- b. Work out the overall percentage increase of the town after this 3 year period.