

National 5

Short Task 14

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

- 1a. Calculate the mean and standard deviation (to 2 d.p.) of the following data:

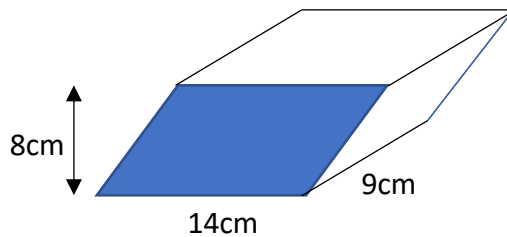
12 17 11 10 13 15

- 1b. Another set of data has a mean of 15 and a standard deviation of 1.75
- i) By comparing both means, make a valid comparison between both sets of data, identifying which set appears to be larger.
- ii). By comparing both standard deviations, make another valid comparison about the consistency shown within each set of data.
2. Solve this system of equations

$$3x + 2y = 17$$

$$5x - 4y = -1$$

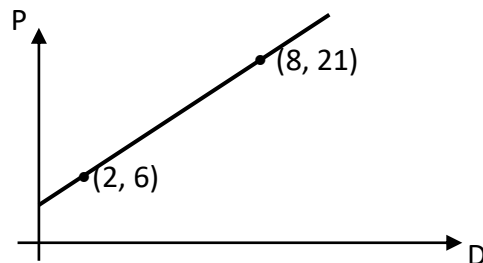
3. Calculate the volume of the shape shown below.



4. Simplify

$$\frac{5x^6 \times 6x^3}{10x^5}$$

5. Find the equation of the straight line shown below, in terms of D and P



6. Evaluate

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

Leave your answer in its simplest form