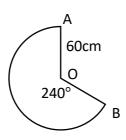
## National 5 Short Task 13

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

- 1. Find the equation of the line joining A(-3,1) and B(3,5)
- 2. Work out the length of arc AB and area of sector AOB below. Leave your answer in terms of  $\pi$ .



3. Remove the brackets and simplify

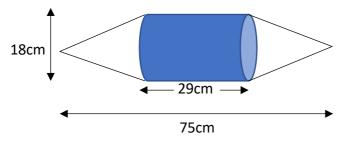
$$(x+4)(2x^2-3x-8)$$

4. Work out the mean and standard deviation of the following data:

11 18 15 15 19 12

5. The shape below consists of a cylinder and two identical cones

Find the volume of the shape. Give your answer correct to 3 significant figures.



6. Write without brackets and simplify

$$(4x^2y^4)^{\frac{1}{2}}$$