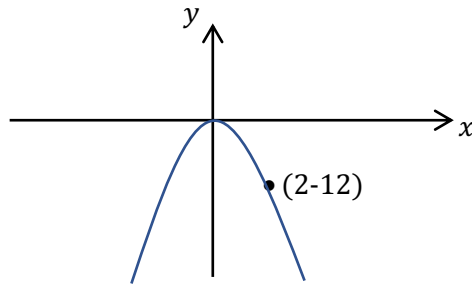


National 5

Short Task 34

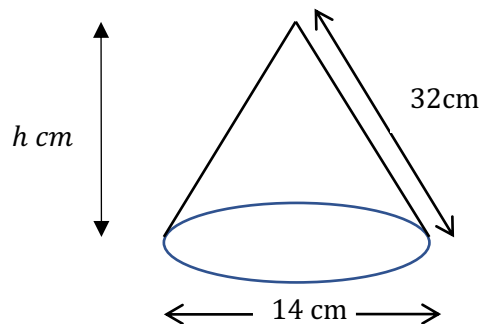
- Evaluate  $2\frac{3}{4} + 1\frac{5}{6} - 2\frac{1}{3}$
- The graph below has equation  $y = ax^2$ . Work out value of  $a$



- A fast food chain sells approximately  $2.36 \times 10^9$  burgers every year. This is equal to  $1.35 \times 10^{12}$  calories. Work out how many calories are in each burger.
- A function has equation  $f(x) = 9x + 5$ . If  $f(a) = 32$ , find the value of  $a$ .
- Fully factorise  $3t^2 - 48$  and hence simplify  $\frac{3t^2 - 48}{2t^2 - 3t - 20}$ .
- Due to a manufacturing fault, a company is forced to reduce the price of a product by 15%. It now sells the product for £68.

What is the full price of the product without the fault?

- Calculate the height,  $h$  cm of the cone below



- Calculate its volume correct to 2 significant figures.