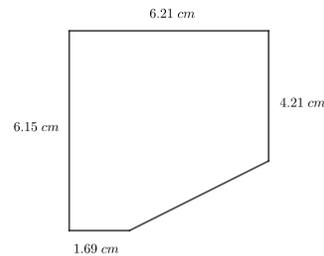


- 1.** [2 points]
Round 257832.16583 to (a) 2 decimal places (b) 3 significant figures.

- 2.** [3 points]
Estimate the area of the following figure by rounding all lengths to 1 significant figure (diagram not to scale).



- 3.** [4 points]
The population of a certain town grows by 2% each year. The current population is 13 200.
- (a) Write down the formula for $P(t)$ - the population P in t years.
- (b) Find the population of this town:
- (i) in 4 years,
 - (ii) last years.
- (c) When will the population first exceed 15 000?

- 4.** [3 points]
Tomasz invests 45 000 PLN into savings account that pays 6% annual interest rate which is compounded every 6 months.
- (a) Find the value of the investment after 5 years.
- (b) How long will it take for the value of the investment to reach 75 000 PLN? Give your answer to the nearest half-year.