

October Daily Tasks Days 8 - 14

8. Fully factorise  $3x^2 - 75$  then simplify the fraction  $\frac{x^2+3x-10}{3x^2-75}$ .

9. After a slump in the economy, house prices are expected to fall by 4% per year for the next four years.

If a house was bought for £121 000, how much will it be worth after 4 years?

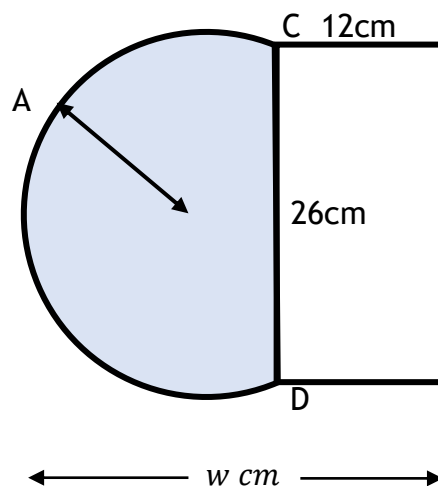
10. Solve

$$5 + 3(3 - 2x) < 26 - 3x$$

11. A diagram of an indoor light is shown below.

AB is a radius of a circle measuring 23cm. CD is a chord of the circle measuring 26cm.

Calculate the width,  $w$  cm of the lamp.



12. Solve the equation

$$\frac{3x+7}{5} = x - 1$$

13. A mechanic adds 12% onto a bill for parts and labour.

If the final bill to the motorist is £177.52, how much was the bill before the additional charge was added?

14. Simplify

$$3\sqrt{18} + \sqrt{32} - 3\sqrt{2}$$