

Summer maths escape room for CBSE Class 10

CBSE Math Revision · CBSE Class 10 (Class 9 can try most of it) · Student sheet

Name _____

Class _____

Date _____

No calculator. Use $\pi = 22/7$ where a lock says so.

Starter (5 minutes)

1. Find $\sqrt{196}$.
2. Write down $\tan 45^\circ$.
3. Work out $(-3)^2$.

Main activity (36 minutes)

Cut out the cards. Each code unlocks the next card.

Lock 1: The shells

Shells are collected one on day 1, two on day 2, and so on.

- a. How many shells are collected in the first 10 days? This is code 1.

Code for lock 1: _____

Lock 2: The prime lock

Write code 1 as a product of primes.

- a. The larger prime is code 2.

Code for lock 2: _____

Lock 3: The equation

The lock shows $3x - 4 = c$, where c is code 2.

- a. Solve for x . This is code 3.

Code for lock 3: _____

Lock 4: The water tank

A cylindrical tank has radius 7 m.

- a. Its height is code 3 metres. Find its volume in m^3 . (Use $\pi = 22/7$.) This is code 4.

Code for lock 4: _____

Lock 5: The kite

The lock shows $\sin 30^\circ$.

- a. Work out $\sin 30^\circ \times \text{code 4} \div 35$. This is code 5.

Code for lock 5: _____

Lock 6: The beach hut

The last lock.

- a. Find the term of the AP 3, 8, 13, ... whose position is code 5. It opens the hut.

Code for lock 6: _____

Extension

1. Find the mean of 4, 7, 9, 12 and 18.