Christmas maths escape room for IB Maths: IGCSE / GCSE

IB Math Revision · IGCSE and GCSE (Higher and Extended) · Student sheet

Name _____ Class _____ Date _____

No calculator needed.

Starter (5 minutes)

1. Work out 7×8.

2. Find 25% of 60.

3. Find the next term: 2, 6, 18, ...

Main activity (36 minutes)

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

Lock 1: The wrapping room

Presents are packed in boxes of 12.

a. There are 180 presents. How many boxes are needed? This is code 1.

Code for lock 1: _____

Lock 2: The list

The elves number their list with a sequence.

a. Find the nth term of 4, 7, 10, 13, ... when n is code 1. This is code 2.

Code for lock 2: _____

Lock 3: The sleigh test

The sleigh does a test run.

a. It travels code 2 kilometres in 20 minutes. Find its speed in km/h. This is code 3.

Code for lock 3: _____

Lock 4: The gift box

A cuboid gift box measures 3 cm by 2 cm by h cm.

a. h = code 3 ÷ 23. Find the volume of the box in cm^3. This is code 4.

Code for lock 4: _____

Lock 5: The crackers

The probability that a cracker contains a paper hat is 5/6.

a. Out of code 4 crackers, how many would you expect to contain a hat? This is code 5.

Code for lock 5: _____

Lock 6: The workshop door

The last lock.

a. Solve $2x - 4$ = code 5. The value of x opens the door.

Code for lock 6: _____

Extension

1. Find the mean of all six codes.