Christmas maths escape room for IB Maths: MYP / KS3: answers

IB Math Revision · MYP / KS3 (ages 11 to 14) · Teacher answers and notes

No calculator needed.

Teacher notes

- Pitched at MYP and KS3 (ages 11 to 14). Every question works without a calculator; ask for a short method with each answer.
- How to run it: print the student sheet and cut out the six lock cards. Give each team lock 1. When a team brings you the right code, give them the next card (the answer key is in the answers PDF). The first team to open lock 6 escapes.
- Each code is used in the next lock, so check every code before the team moves on: one slip early on breaks the chain.

Starter

1. **54**
   - 9 × 6 = 54
2. **43**
   - 86 ÷ 2 = 43
3. **63**
   - 100 − 37 = 63

Lock 1: The toy shelves

a. **96**

- 8 × 12 = 96

Lock 2: The wrapping table

a. **24**

- 96 ÷ 4 = 24

Lock 3: The reindeer pen

a. **68**

- 2 × (24 + 10) = 68

Lock 4: The cocoa machine

a. **20**

- 25% of 68 = 17
- 17 + 3 = 20

Lock 5: The sleigh bells

a. **12**

- 20 ÷ 5 = 4, and 3 × 4 = 12

Lock 6: The workshop door

a. **14**

- 4 × 12 = 48
- $3x + 6 = 48$, so $3x = 42$ and $x = 14$

Extension

1. **39**
   - 96 + 24 + 68 + 20 + 12 + 14 = 234
   - 234 ÷ 6 = 39

Every question is original and every answer was checked before publishing.