Halloween maths activities for IB Maths SL and HL: MYP / KS3: answers

IB Math Revision · MYP / KS3 (ages 11 to 14) · 31 October · Teacher answers and notes

No calculator needed. Every answer works out exactly.

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.
- Task B leads into expected frequency: ask why Mia might not get exactly 15 treats.

Starter

1. **−5 m (5 m below the ground)**
   - 7 − 12 = −5
2. **23**
   - Multiply first: 4 × 5 = 20.
   - 3 + 20 = 23
3. **900 g**
   - 600 ÷ 4 = 150 g for one bowl.
   - 150 × 6 = 900 g
4. **3/8**
   - There are 3 + 5 = 8 sweets and 3 are orange.

Task A: Pumpkin patch

a. **96 m^2**
   - 12 × 8 = 96

b. **40 m**
   - 2 × (12 + 8) = 40

c. **24 plants**
   - 96 ÷ 4 = 24

d. **10 lanterns**
   - 5 + 2 = 7 parts, so one part is 35 ÷ 7 = 5.
   - Lanterns: 2 × 5 = 10

Task B: Trick or treat

a. **15 treats**
   - 3/4 of 20 = 15

b. **1/6**
   - There are 6 + 4 + 2 = 12 sweets.
   - 2/12 = 1/6

c. **2/3**
   - 12 − 4 = 8 sweets are not lollies.
   - 8/12 = 2/3

Extension

1. **12 routes**
   - Each of the 3 doors goes with each of the 4 staircases.
   - 3 × 4 = 12
2. **500 years**
   - Total of the four: 4 × 250 = 1000.
   - Total of the five: 5 × 300 = 1500.
   - 1500 − 1000 = 500

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