

Prior-knowledge relay and maths bingo for IB

Maths: answers

IB Math Revision · IB Maths SL and HL (AA and AI) · Teacher answers and notes

No GDC needed.

Teacher notes

- ‘Find someone who...’ bingo (starter): students walk round with the sheet and find a different classmate who can do each one; that classmate writes the answer and their initials. First to fill the sheet with correct answers wins. It mixes the class and shows you, at a glance, what was remembered from last year.
- Relay: teams of four sit in a row. Student 1 answers question (a) and passes the answer to student 2, who needs it for (b), and so on. The team brings you the final answer; if it is wrong, they find the broken link together. Nothing is recorded on the site.
- Afterwards, set the [baseline test](#) for a fuller picture of what each student remembers; 20 multiple-choice questions with an instant topic-by-topic report.

Starter

1. $4x^2 - 12x + 9$
 - $(2x)^2 - 2 \times 2x \times 3 + 9$
2. **3**
 - $(11 - 2)/(4 - 1) = 3$
3. x^2
 - $x^6 - 4$
4. **$x = 2$ or $x = 3$**
 - $(x - 2)(x - 3) = 0$

Task A: Leg 1: number and algebra

- a. **4**
 - $(\sqrt[3]{8})^2 = 2^2$
- b. **6**
 - $4^3 = 64 = 2^6$
- c. **78**
 - $S_6 = 6/2 \times (2 \times 3 + 5 \times 4) = 3 \times 26 = 78$
- d. **$2 \times 3 \times 13$**
 - $78 = 2 \times 39 = 2 \times 3 \times 13$

Task B: Leg 2: functions

- a. **7**
 - $12 - 5 = 7$
- b. **3**
 - $2x + 1 = 7$ gives $x = 3$

c. **5**

- $(x - 5)(x + 2) = 0$

d. **(5, 2)**

- The vertex of $(x - h)^2 + k$ is (h, k) .

Task C: Leg 3: triangles and data

a. **10**

- $\sqrt{36 + 64} = 10$

b. **12**

- $4 \times 10 = 40$
- $40 - 28 = 12$

c. **13**

- $\sqrt{25 + 144} = 13$

d. **12/13**

- The side next to θ is 12 and the hypotenuse is 13.

Extension

1. **5; (2.5, 4)**

- $\sqrt{3^2 + 4^2} = 5$
- $((1 + 4)/2, (2 + 6)/2) = (2.5, 4)$

Every question is original and every answer was recomputed by computer before publishing.