



Independent Schools  
Examinations Board

**COMMON ENTRANCE EXAMINATION AT 13+**

**MATHEMATICS**

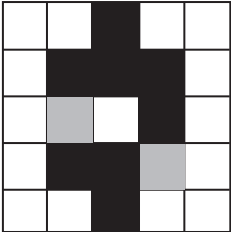
**MENTAL ARITHMETIC TEST**

**MARK SCHEME**

**Monday 22 January 2018**



# MENTAL ARITHMETIC

| Q.                | Answer                                                                                      | Mark      | Additional Guidance                                     |
|-------------------|---------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------|
| Practice question | 100                                                                                         |           |                                                         |
| 1.                | 12                                                                                          | 1         |                                                         |
| 2.                | -26                                                                                         | 1         |                                                         |
| 3.                | $a = 52^\circ$                                                                              | 1         |                                                         |
| 4.                | 4th of December                                                                             | 1         |                                                         |
| 5.                | 40%                                                                                         | 1         |                                                         |
| 6.                | 1.0411                                                                                      | 1         |                                                         |
| 7.                | 73                                                                                          | 1         |                                                         |
| 8.                | £3.00                                                                                       | 1         |                                                         |
| 9.                |           | 1         |                                                         |
| 10.               | 143500000                                                                                   | 1         |                                                         |
| 11.               | 12                                                                                          | 1         |                                                         |
| 12.               | $240^\circ$                                                                                 | 1         |                                                         |
| 13.               | $x = 2$ or equivalent                                                                       | 1         |                                                         |
| 14.               | 16                                                                                          | 1         |                                                         |
| 15.               | 18                                                                                          | 1         |                                                         |
| 16.               | $y = \text{one of } \frac{4}{3}, \frac{5}{3}, \frac{7}{3}, 3, \frac{13}{3}, 5 \text{ etc.}$ | 1         |                                                         |
| 17.               | 900                                                                                         | 1         |                                                         |
| 18.               | $\frac{1}{6}$                                                                               | 1         |                                                         |
| 19.               | 3                                                                                           | 1         | strictly $\neq 3$ but only positive factors in syllabus |
| 20.               | $h = 6\text{cm}$                                                                            | 1         |                                                         |
| <b>Total</b>      |                                                                                             | <b>20</b> |                                                         |