**Standard Form - mixed exercise**

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| Name : | Class : | Date : |

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| Mark : | /8 | % |

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| **1)** Rewrite as a normal number      a)  $5×10^{2}$     b)  $1.27×10^{-1}$ | [2]   |
| **2)** Rewrite in standard form      a) 8,300,000     b) 0.000002 | [2]   |
| **3)** Work out and express your answer in standard form      a)  $(3.4×10^{5})$  $+$  $(3.2×10^{5})$     b)  $(8×10^{-4})$  $×$  $(4×10^{5})$ | [2]   |
| **4)** Write in standard form        $30$  $×$  $10^{4}$ | [1]   |
| **5)** Use the information in the table to answer the questions below

|  |  |  |  |
| --- | --- | --- | --- |
| **Planet** | **Image** | **Mass (kg)** | **Distance to Sun (km)** |
| **Uranus** | **http://www.mathster.com/assessment/qimages/Uranus.jpg** | $8.68×10^{25}$ | $2.87×10^{9}$ |
| **Mercury** | **http://www.mathster.com/assessment/qimages/Mercury.jpg** | $3.3×10^{23}$ | $5.79×10^{7}$ |
| **Earth** | **http://www.mathster.com/assessment/qimages/Earth.jpg** | $5.97×10^{24}$ | $1.5×10^{8}$ |
| **Saturn** | **http://www.mathster.com/assessment/qimages/Saturn_0.jpg** | $5.69×10^{26}$ | $1.43×10^{9}$ |

     a) Which planet is lightest?     ..........     b) Which planet is furthest from the sun?     ..........      | [1]   |

**Solutions for the assessment Standard Form - mixed exercise**

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| **1)**  a) 500 |      b) 0.127 |
| **2)**  a)  $8.3×10^{6}$ |      b)  $2×10^{-6}$ |
| **3)**  a)  $6.6×10^{5}$ |      b)  $3.2×10^{2}$ |
| **4)**  $3×10^{5}$ | **5)** a) Mercury, b) Uranus |