**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)  $2×10^{5}$     b)  $1.5×10^{-4}$ | [2]   |
| **2)** Rewrite in standard form      a) 708     b) 0.0009 | [2]   |
| **3)** Work out and express your answer in standard form      a)  $(2.4×10^{2})$  $+$  $(1.6×10^{2})$     b)  $(5×10^{-3})$  $×$  $(1×10^{5})$ | [2]   |
| **4)** Write in standard form        $20$  $×$  $10^{6}$ | [1]   |
| **5)** Use the information in the table to answer the questions below

|  |  |  |  |
| --- | --- | --- | --- |
| **Planet** | **Image** | **Mass (kg)** | **Distance to Sun (km)** |
| **Jupiter** | **http://www.mathster.com/assessment/qimages/Jupiter.jpg** | $1.9×10^{27}$ | $7.78×10^{8}$ |
| **Earth** | **http://www.mathster.com/assessment/qimages/Earth.jpg** | $5.97×10^{24}$ | $1.5×10^{8}$ |
| **Mars** | **http://www.mathster.com/assessment/qimages/Mars.jpg** | $6.42×10^{23}$ | $2.28×10^{8}$ |
| **Saturn** | **http://www.mathster.com/assessment/qimages/Saturn_0.jpg** | $5.69×10^{26}$ | $1.43×10^{9}$ |

     a) Which planet is heaviest?     ..........     b) Which planet is nearest the sun?     ..........      | [1]   |

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

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| **1)**  a) 200,000 |      b) 0.00015 |
| **2)**  a)  $7.08×10^{2}$ |      b)  $9×10^{-4}$ |
| **3)**  a)  $4×10^{2}$ |      b)  $5×10^{2}$ |
| **4)**  $2×10^{7}$ | **5)** a) Jupiter, b) Earth |