**form**

**standard**

**B**

**Pythagroas**

**GRADE BUSTER**

*Your ‘5 a day’ mathematical workout*

1. Work out the value of:

a) (3.2 105) (4.1 107) b) (7.2 109) ÷ (4.1 106)

c) (8.9 10-3) (4.1 10-4) d) (3.2 106) + (4.1 108)

Give your answers in standard form.

2. **NON - CALCULATOR**

Work out the value of:

a) (4 105) (2 107) b) (6 10-5) (3 103)

c) (8 109) ÷ (2 104) d) (3 1012) + (6 109)

Give your answers in standard form.

3. Find 3 different numbers in standard form between 250 000 and 3 million.

4. i) Explain what is wrong with the following solution:

i) (4 105) (6 107)

= 24 x 1035 = 2.4 x 1036

ii) (9 109) ÷ (2 103)

= 4.5 x 103

**Non- Calculator**

Work out the value of:

i) (4 105) (6 107)

ii) (9 109) ÷ (2 103)

ii) Find the correct solution

5) The distance from Earth to the Sun is 1.49 108 km.

How long would take to travel to the Sun from Earth in a car travelling at 100km/h?

Give your answer to the nearest number of years!

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| Qu |  | ☺ | ☹ |
| 3 | I can express number using standard form |  |  |
| 1 | I can calculate with numbers in standard form using a calculator |  |  |
| 2 & 4 | I can I can calculate with numbers in standard form without using a calculator |  |  |
| 5 | I can solve problems involving numbers expressed in standard form |  |  |

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| Top tips I must remember for the exam: |
| ☺  ☺  ☺ |
| Types of questions I need to practise more: |
| ☺  ☺  ☺ |