**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!

|  |  |  |  |
| --- | --- | --- | --- |
| 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 |  |  |

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