

**AQA, OCR, Edexcel**

**GCSE**

# **GCSE Maths**

Standard Form Answers

Name:

**M**

**M**

**E**

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Total Marks: /28

## Standard Form (Non-Calculator)

1. Write down the following in expanded form:

a.  $6.3 \times 10^{-1}$

b.  $5.6 \times 10^{-3}$

c.  $1.2 \times 10^5$

d.  $9.9 \times 10^4$

e.  $5.6 \times 10^{-8}$

f.  $1.0 \times 10^5$

g.  $3.1 \times 10^4$

h.  $1.9 \times 10^{-9}$

(8 Marks)

$a = 0.63$

$b = 0.0056$

$c = 120000$

$d = 99000$

$e = 0.000000056$

$f = 100000$

$g = 31000$

$h = 0.000000019$

2. Express the following numbers in standard form:

a. 68000000

b. 0.00000023

c. 13000

d. 67

e. 0.0000000000044

f. 1200

g. 400

h. 9900000000000

(8 Marks)

$a = 6.8 \times 10^7$

$b = 2.3 \times 10^{-7}$

$c = 1.3 \times 10^4$

$d = 6.7 \times 10^1$

$e = 4.4 \times 10^{-12}$

$f = 1.2 \times 10^3$

$g = 4.0 \times 10^2$

$h = 9.9 \times 10^{12}$

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3. Calculate the following. Give your answer in standard form:

a.  $4.0 \times 10^{-1} \times 3.0 \times 10^{-3}$

b.  $1.2 \times 10^{-3} \div 3.0 \times 10^5$

c.  $1.2 \times 10^5 \times 2.0 \times 10^{-9}$

d.  $9.0 \times 10^4 \times 3.0 \times 10^4$

e.  $5.6 \times 10^{-8} \div 7.0 \times 10^{-1}$

f.  $1.0 \times 10^5 \div 5.0 \times 10^{-1}$

(12 Marks)

a =  $1.2 \times 10^{-3}$

b =  $4.0 \times 10^{-9}$

c =  $2.4 \times 10^{-4}$

d =  $2.7 \times 10^9$

e =  $8.0 \times 10^{-8}$

f =  $2.0 \times 10^5$