

Delta 1

Unit 2 Review (Non-Calculator)

Number Skills

How well did you do:

Number Skills	Score = $\frac{\quad}{57}$	
---------------	----------------------------	--

Topics/skills which need to be revisited:	Questions from the Review	Further Practice from Delta 1
<ul style="list-style-type: none"> • Understand what a prime number is • Find the HCF of two numbers • Find the LCM of two numbers 	<ul style="list-style-type: none"> • 1b • 2 • 3 	<ul style="list-style-type: none"> • P46 Q1 • P46 Q2,3 • P46 Q4,5
<ul style="list-style-type: none"> • Adding/subtracting negative numbers • Multiplying/dividing negative numbers 	<ul style="list-style-type: none"> • 6 • 7 	<ul style="list-style-type: none"> • P47 Q10 • P47 Q11
<ul style="list-style-type: none"> • Multiply two (2 or 3 digit) numbers • Divide by a 2-digit number • Divide by a number, where final answer is less than 1 	<ul style="list-style-type: none"> • 4 • 5a • 5b 	<ul style="list-style-type: none"> • P35 Q5,6 • P47 Q8,9 • P36 Q10
<ul style="list-style-type: none"> • Estimating square roots • Understand when squaring $(-9)^2 = 9^2$ • Use a given fact to work out a complicated square root 	<ul style="list-style-type: none"> • 8 • 10 • 14 	<ul style="list-style-type: none"> • P47 Q2 • P37 Q5 • P48 Q5b,c,d
<ul style="list-style-type: none"> • Understand what a cube number is • Know how to cube root a negative • Use a given fact to work out a complicated cube root 	<ul style="list-style-type: none"> • 1a • 13 • 15 	<ul style="list-style-type: none"> • P47 Q1b,d,f • P39 Q63,f • P48 Q6b,c,d
<ul style="list-style-type: none"> • Use the correct priority of operations (BIDMAS/BODMAS) 	<ul style="list-style-type: none"> • 9,11,12,16 	<ul style="list-style-type: none"> • P49 Q1-5

1. Look at this list of numbers.
1, 2, 9, 13, 27, 29

Which of the numbers are:

a. cube numbers

b. prime numbers?

(4 marks)

2. What is the highest common factor of 18 and 24? (show your working)

(2 marks)

3. What is the lowest common multiple of 12 and 6? (show your working)

(2 marks)

4. Ms Winters has given £918 to each of her favourite 17 people. (show your working)
How much in total has she given away?

(2 marks)

5. (a) Work out $20 \div 16$ (show your working)

(b) $3 \div 8$ (show your working)
(write your answer as a decimal)

(4 marks)

6. Work out: (show your working for a, b, d)

a. $10 + - 6$

b. $8 - - 7$

c. $- 2 + 23$

d. $- 4 - - 9$

(7 marks)

7. Work out:

a. -5×8

b. $-36 \div -3$

c. $500 \div -5$

(3 marks)

8. Estimate the answer to $\sqrt{27}$. Give your answer to 1 d.p.

(2 marks)

9. Work out: (show your working for all questions)

a. $5(3 + 4)$

b. $(100 - 60)^2$

c. $3^2 \times (\sqrt{49} + 1)$

d. $11^2 + (17 - 8)^2$

(8 marks)

10. Write down two numbers whose square is 81.

(2 marks)

11. Work out: (show your working for all questions)

a. $2 \times 8 + 4^3$

b. $11 \times \sqrt[3]{27} + 50$

c. $\frac{100}{\sqrt[3]{64}} + 3 \times 15$

(6 marks)

12. Work out: (show your working for all questions)

a. $2 \times (-4)^2$

b. $(-10)^3 \times -5$

(4 marks)

13. Work out $\sqrt[3]{(-27)}$

(1 mark)

14. $1296 = 4 \times 9 \times 36$

Use the above fact to work out $\sqrt{1296}$
(show your working clearly)

(2 marks)

15. $-216 = -8 \times 27$

Use the above fact to work out $\sqrt[3]{-216}$
(show your working clearly)

(2 marks)

16. Work out: (show your working for all questions)

a. $3 \times (7 + 8)^2$

b. $3^2 \times (7 + 8)$

c. $(3 \times (7 + 8))^2$

(6 marks)

TOTAL = 57 marks