

Algebra 1

Task A: Sequences

1) Continue the following sequences:

a) 1, 3, 5, 7, 9, __, __, __

b) 4, 7, 10, 13, 16, __, __, __

c) 9, 18, 27, 36, __, __, __

d) 100, 97, 94, 91, __, __, __

e) 0, 50, 100, 150, __, __, __

f) 10, 8, 6, 4, __, __, __

g) 1, 3, 6, 10, __, __, __

h) 1, 2, 4, 8, __, __, __

2) Write down the first 5 terms of the sequences described below:

a) Start with 1 then add 4 each time.

b) Start with 6 then add nine each time.

c) Start with 20 then take away 3 each time.

d) Start with 3 then double each time.

e) Start with 16 then halve each time.

Task B: Multiplication and Squares

1) Work out the answers to the following multiplications:

a) i) 2×4

ii) 3×4

iii) 4×4

iv) 5×4

b) i) 5×6

ii) 10×6

iii) 15×6

iv) 20×6

c) i) 12×3

ii) 12×30

iii) 12×300

iv) 12×3000

d) i) 2×17

ii) 3×17

iii) 4×17

iv) 5×17

e) i) 2×21

ii) 3×21

iii) 5×21

iv) 10×21

2) Square each of the numbers below:

a) 3

c) 11

e) 100

g) 32

b) 7

d) 20

f) 16

h) 57

3) Square-root each of the numbers below:

a) 16

c) 49

e) 100

g) 900

b) 25

d) 81

f) 400

h) 225

Task C: Variables

If $s = 4$, calculate the following:

a) $s + 2$

c) $s \times 3$

e) $s \times s$

g) $(s + 1) \times (s + 2)$

b) $s - 1$

d) $s \div 2$

f) $s \div s$

h) $2 + (s \times 5)$