

Algebra 1

test 3b

name.....

1) For each pattern write down the next 2 numbers

a) 42 , 36 , 30 ,

b) -10 , -17 , -24 ,

c) 1 , 4 , 9 , 16 ,

d) 5 , 11 , 21 , 35

e) 9 , 12 , 17 , 24

f) 5 , -1 , -7 ,

2) Complete these tables

a) $y = x + x + x + x + x$

x	1	2	3	4
y				

b) $p = 5q^2 + 4$

q	1	2	3	4
p				

c) $m = 2n^2 + 5$

n	7	8	9	10
m				

d) $d = 7c + 3c$

c	1	2	3	4
d				

3) $x = 3$, $y = 4$ and $z = 10$.
Substitute and evaluate these expressions.

a) $3y + 7y$

=

=

b) $xz^2 - 3x$

=

=

c) $(xz)^2$

=

=

d) $2y^2 + xz$

=

=

e) $xy + z \div 2$

=

=

4) Find the equation which describes the number pattern

a)

x	1	2	3	4
y	13	10	7	4

y =

b)

x	1	2	3	4
y	5	8	13	20

y =

c)

x	2	7	9	3
y	17	62	80	26

y =

5) Evaluate the pronumeral

a) $a + 5 = 17$

a =

b) $b - 15 = 16$

b =

c) $2c = 11$

c =

d) $d \div 7 = 11$

d =

e) $6e + 9 = 27$

e =

f) $f^2 + 7 = 43$

f =

g) $5g - 9 = 41$

g =

h) $5h + 3h = 64$

h =

i) $h^2 + h = 72$

h =

j) $50 - 4j = 6$

j =

k) $100 - k^2 = 19$

k =