Algebra 1

test 2e

name.....

1) For each pattern write down the next 2 numbers

a) 25 , 20 , 15 ,

b) 15 , 21 , 27 ,

c) 2.5 , 3.1 , 3.7 ,

d) 2 , 4 , 8 , 16 ,

e) 1 , 4 , 9 , 16 ,

f) 80 , 76 , 71 , 65 ,

2) Complete these tables

a) $y = 2x + 5$

x	1	2	3	4
y				

b) $p = 3q^2$

q	1	2	3	4
p				

c) $m = n^2 + 4$

n	7	8	9	10
m				

d) $d = 5c + 1$

c	1	2	3	4
d				

e) $f = e^2 - 1$

e	1	3	5	7
f				

f) $h = 2(k + 6)$

k	1	2	3	4
h				

g) $p = (a + 2) \div 2$

a	0	6	12	18
p				

3) $x = 2$, $y = 4$ and $z = 6$. Substitute and evaluate these expressions.

a) $5yz$

=

=

b) xz^2

=

=

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	6	9	12	15

y =

b)

x	1	2	3	4
y	5	15	25	35

y =

c)

x	1	2	3	4
y	3	8	13	18

y =

d)

x	1	2	3	4
y	7	11	15	19

y =

5) Evaluate the pronumeral

a) $a + 3 = 17$

$a =$

b) $b - 12 = 7$

$b =$

c) $6c = 48$

$c =$

d) $d \div 7 = 9$

$d =$