

ALGEBRA & THE NUMBER LAWS TEST

name _____



1) Simplify by the easiest method. (show working)

a) $367 + 489 + 33$

=

=

b) $67 \times 5 \times 0 \times 20$

=

c) $4 \times 56 \times 25$

=

=

d) $895 + 786 + 105$

=

=

2) Simplify

a) $7k + 5k =$

b) $m \times n =$

c) $6g \times 3f =$

d) $5ab + 4ba =$

e) $6y \times 1 =$

f) $5y + 6 + 2y =$

g) $7k + 0 =$

h) $7t \times 3t =$

i) $7g \div 7 =$

j) $8jk \div 2k =$

k) $7y - 5y =$

l) $6g + 7g - 5g =$

m) $3y^2 \div y =$

3) Expand

a) $6(f + 5) =$

b) $7(5t - 3) =$

c) $4(y + 8) =$

d) $y(h - 2t) =$

e) $k(6t + 5y) =$

f) $8(9r + 4) =$

g) $3(9y - 1) =$

h) $6(7g + 2) =$

4) Expand and simplify

a) $5(7y + 3) + 3(3y + 8)$

=

=

b) $2(8k + 3) + 6(4k + 7)$

=

=

c) $8(3t + 4) + 5(6t - 2)$

=

=

d) $5(9g + 3) + 4(4g - 2)$

=

=

e) $4y + 5(6y + 9) - 45$

=

=

f) $8(6k + 5) + 4(7 - 12k)$

=

=

g) $4(9m + 7) - 36m$

=

=

h) $9(6e + 5) + 8(e - 4)$

=

=

5) Simplify

a) $6y + 9y - y =$

b) $8k - 6k + 4k =$

c) $7y + 5 - 5y =$

d) $4k \times 8k =$

e) $7g \times 7h =$

f) $9cd - cd =$

g) $7 + 8 + 9k =$

h) $8abc \div 2a =$

i) $8k + k^3 =$

j) $7y \times 3k \times 1 =$

k) $8y \times 3y \times 0 =$

l) $8y + 6y - 5k =$

m) $7t + 9k - 5t - 8k$

=

n) $6r + 8h + 6r - h$

=

o) $9p + 8t - 9p - 7t$

=

6) Expand

a) $6(5y + 9) =$

b) $7y(4y - 8) =$

c) $5f(7g + 6f) =$

d) $9k(6k - 7y) =$

7) Factorise

a) $5y + 15 =$

b) $6t - 9 =$

c) $4f + 12 =$

d) $ak + ay =$

e) $k^2 + 3k =$

f) $9m + 15 =$

g) $7h - 21 =$

h) $12y + 18 =$

i) $4d - 6k =$

j) $9n + 12 =$

this test is
fabulous fun

