

ALGEBRA TEST

name.....

1) Simplify

a) $-4p + 7p$

=

b) $6y - 3x + 2y + x$

=

c) $-5t - 3q + t - 2q$

=

2) Expand

a) $4(2p - 7)$

=

b) $-3(5g + 9)$

=

c) $2y(3y - 1)$

=

3) Expand & simplify

a) $4(2y - 3) + 7(y + 1)$

=

=

b) $-2(p - 7) - (p + 8)$

=

=

c) $8(2d + 3) - 6(3p + 4)$

=

=

4) If $X = 3$ and $Y = -4$,
evaluate :

a) $2X - Y$

=

=

b) $\sqrt{X^2 + Y^2}$

=

=

5) Write an expression for

a) the number 8 less than m

b) the number 7 more than
twice k .

6) Simplify

a) $8ab \times 3a^2b$

=

b) $\frac{2p^2q^2}{3p^3q}$

=

c) $3k^7 \times 2k^3$

=

d) $8h^6 \div 2h^2$

=

e) $(2m^4)^3$

=

7) Factorise

a) $3y + 6$

=

b) $10f^2 + 5fg$

=

8) Factorise and simplify

a) $\frac{ab + a}{3a}$

=

=

b) $\frac{2y^2 + 8y}{3y + 12}$

=

=

9) Evaluate

a) $7^0 + 3^2 =$

b) $(5y)^0 + 2 =$

10) Express as an ordinary decimal

a) $7.62 \times 10^{-3} =$

b) $4.176 \times 10^2 =$

11) Write in standard notation

$8921.3 =$