

National 4 (S3) Maths Homework 3

1) Simplify the following:

a) $3 \times 5p$

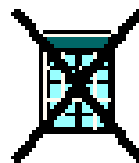
b) $3c^2 + 2c^2 - c^2$

c) $4h + 2n - 7h + 5n$

d) $9a \times 5b$

e) $3 + 6q + 2r - 3q$

f) $4c + 3b - 6c + b$



2) Factorise the following

a) $3a + 6$

b) $4b - 28$

c) $6a - 15$

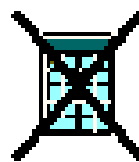
d) $24b + 16$

e) $12x - 21$

f) $4 + 18z$

g) $7 - 14x$

h) $5 + 20b$



3) Evaluate,

a) 76×30

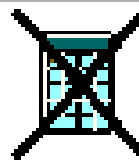
b) $9\,400 \div 200$

c) 17×4000

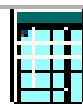
d) $8680 \div 70$

e) 843×900

f) $84\,000 \div 3000$



4) 136 pupils and 8 teachers go on an excursion.



a) How many 42 seater coaches are needed?

b) How many empty seats will there be?

5) Expand and simplify.

a) $3(a - 2) - 2a$

b) $8(z - 3) + 2(z + 4)$

c) $9 + 2(3w - 1)$

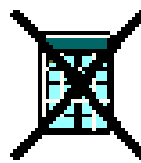
d) $3(1 - t) + 4(t + 4)$

e) $8(q - 3p) + 4qc$

f) $5(2 - 3x) + 4(2 - x)$

g) $6k - 4(7 + k)$

h) $8(5c + 2d) + 2(3c + 4d)$



6) For $a = 5$, $b = 8$, $c = 2$ and $d = 3$

a) $6a + 9$

b) $12b - 4d$

c) $2c^2 + 3$

d) ab

e) $100 - b^2$

f) $6acd$

