

National 4 Maths Homework 4

1) Factorise the following

a) $pq - q$

b) $3rs - 12s$

c) $15gh + 10g$

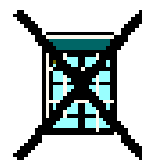
d) $8cd - 16d$

e) $15y + 30y^2$

f) $12pq^2 - 6q$

g) $18x - 36x^2$

h) $9p^2 - 3qp$



2) Evaluate:

a) $7 + (-7)$

b) $(-8) \times 5$

c) $4 - (-8)$

d) $(-2) \times (-4)$

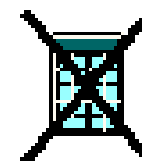
e) $(-12) \div 3$

f) $-24 \div (-8)$

g) $8 + (-4)$

h) -6×8

i) $-16 + 4$

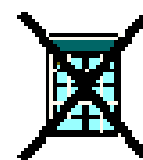


3) a) Find a formula that links y to x .

x	1	2	3	4	5
y	4	8	12	16	20

b) Find y if $x = 13$.

c) Find x if $y = 168$.

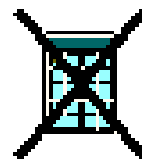


4) a) Find a formula that links y to x .

x	1	2	3	4	5
y	8	11	14	17	20

b) Find y if $x = 11$.

c) Find x if $y = 95$.



5) Simplify the following

a) $a + 2b + 3a - b$

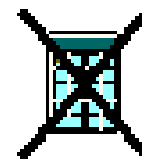
b) $w \times w \times 3$

c) $3x^2 - x^2$

d) $p + 2q - 2p$

e) $2y \times y$

f) $s^2 + 3t^2 + 3s^2 - 2t^2$



6) A butcher sells fillet steak for £9.50 per kg and mince for 88p per kg.
How much would 500 grams of fillet steak and 3 kg of mince cost?

