## K Education Centre

## KS3 Mathematics Year 7

Algebra Assignment 3

Assignment Questions
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## Algebra

Q1 : Work out following expressions If $\mathbf{a}=\mathbf{1} \mathbf{b}=\mathbf{2}$ and $\mathbf{c}=\mathbf{3}$
a) $2 a-4 b+c$
b) $\mathrm{a}^{\mathbf{3}}+\mathrm{b}^{\mathbf{3}}+\mathrm{c}^{\mathbf{3}}$
c) $5(a+3 b+4 c)$
d) $\frac{1}{2}(2 a+5 b+6 c)$
e) $4 a+\frac{18}{c}$

Q2: Expand the following :
a) $y(y+6)$
b) $x^{2}(x-2)$
c) $y^{3}\left(y^{2}+y+4\right)$
d) $5 y(y-6)$
e) $2 y(y+8)$
f) $6 r\left(r^{2}+2\right)$

Q3 : Tom takes eight minutes to make a toy. It takes him $T$ minutes to make $n$ toys. Write down the formula for $\boldsymbol{T}$ in terms of $\boldsymbol{n}$.

Q4 : In a science test paper there are three sections. Each correct answer in section A is worth 1 marks, in section B each correct answer worth $\mathbf{2}$ marks and in section $C$ each correct answer worth $\mathbf{3}$ marks.

Charlie takes the test and gets $p$ questions right in section $A, q$ question right in section $B$ and $r$ question right in section $C$.
a) Write down an formula for Charlie's total marks T in terms of $p, q$ and $r$
b) Work out the total marks T if $p=5, q=8$ and $r=4$

Q 5 : The cost of one bag of sugar is $£ 5$, Billy buys 16 bags. He uses this formula :
Total cost $=$ cost of one bag $\mathbf{x}$ number of bags.
Find the total price Billy pays for the bags.

