QUESTION 1 If $m = 7$, $n = 4$ and $p = 12$, evaluate the following.

a $mn =$ _____ **b** $mnp =$ _____

c $mn \div p =$ _____ **d** $m^2n^2 =$ _____

e $mnp^2 =$ _____ **f** $m^2 + n^2 + p^2 =$ _____

g $m + n + p =$ _____ **h** $7m - p =$ _____

QUESTION 4 If $a = 3$, $b = 4$, $c = 5$ and $d = 6$, find the value of each expression.

a $6c^2 - ab =$ _____ **b** $a^2 + b^2 + c^2 =$ _____

c $abcd =$ _____ **d** $ab - cd =$ _____

e $b^2 + c^2 - a^2 =$ _____ **f** $b^2 - 5 =$ _____

QUESTION 2 Evaluate the following expressions if $a = 3$, $b = -2$ and $c = 6$.

a $a + b + c =$ _____ **b** $ab + c =$ _____ **c** $ab \div c =$ _____

d $a^2 + b^2 =$ _____ **e** $a - b - c =$ _____ **f** $(a + b + c)^2 =$ _____

g $\dfrac{a + b + c}{7} =$ _____ **h** $a(b + c) =$ _____ **i** $a + 2b + c =$ _____

j $a^2 + c^2 - b^2 =$ _____ **k** $a^3b =$ _____ **l** $2c \div a =$ _____

m $abc =$ _____ **n** $\dfrac{1}{a} + \dfrac{1}{c} =$ _____ **o** $\dfrac{a}{b} + \dfrac{b}{a} =$ _____

QUESTION 2 If $a = 4$, find the value of the following expressions.

a $5a + 7 =$ _____ **b** $(a - 5)^2 =$ _____

c $a^2 - 9 =$ _____ **d** $85 - 4a =$ _____

e $3a(a + 4) =$ _____ **f** $5a^2 + 8 =$ _____

g $5(a + 6) =$ _____ **h** $a^3 =$ _____

i $\sqrt{25 - a^2} =$ _____ **j** $3(2a + 7) =$ _____

k $3a^2 =$ _____ **l** $(a + 7)(a - 7) =$ _____

QUESTION 3 If $a = \dfrac{1}{4}, b = \dfrac{1}{5}$ find the exact value of the following.

a $a + b =$ _____ **b** $a - b =$ _____ **c** $\dfrac{a + b}{a - b} =$ _____

d $\dfrac{a - b}{a + b} =$ _____ **e** $\dfrac{a - b}{a + b} + \dfrac{a + b}{a - b} =$ _____ **f** $a^2 + b^2 =$ _____