

Assignments for Factorization

Question 1

Verify that

$$(11m + 4n)^2 - (11mn - 4n)^2 = 176mn^2$$

Question 2

True and false

a) The value of $(a + 1)(a - 1)(a^2 + 1)$ is $a^4 + 1$.

b) $x + y + z$ is a monomial

c) Some of the factors of $\frac{p}{2} + \frac{p^2}{2}$ are $p, 1/2$ and $(p+1)$

d) if $xy=20$ and $(x- y) = 1$, the value $(x+y) = 9$

Question 3

Factorise

$$x^2 + \frac{1}{x^2} + 2 - 3x - \frac{3}{x}$$

Question 4

The Length and breadth of the rectangle is $(x+y)$ and $(x-y)$ respectively. What is the area of the rectangle

Question 5

What should be added to $4c(-a + b + c)$ to obtain $3a(a + b + c) - 2b(a - b + c)$?