Factorizations Ex 7.2 Q1

Answer :

The greatest common factor of the terms 3x and -9 of the expression 3x - 9 is 3.
Now.
3x = 3x
and
-9 = 3.-3
Hence, the expression 3x - 9 can be factorised as 3(x - 3).

Factorizations Ex 7.2 Q2

Answer :

The greatest common factor of the terms 5x and $15x^2$ of the expression 5x - $15x^2$ is 5x.
Now,
5x = 5x × 1
and
$-15x^2$ = 5x × -3x
Hence, the expression 5x - $15x^2$ can be factorised as 5x(1 - 3x).

Factorizations Ex 7.2 Q3

Answer :

The greatest common factor of the terms $20a^{12}b^2$ and $-15a^8b^4$ of the expression $20a^{12}b^2 - 15a^8b^4$ is $5a^8b^2$.
$20a^{12}b^2 = 5\times4\times a^8\times a^4\times b^2 = 5a^8\times b^2\times 4a^4$ and $-15a^8b^4 = 5\times-3\times a^8\times b^2\times b^2 = 5a^8b^2 \times -3b^2$

Hence, the expression $20a^{12}b^2 - 15a^8b^4$ can be factorised as $5a^8b^2(4a^4-3b^2)$

Factorizations Ex 7.2 Q4

Answer :

The greatest common factor of the terms $72x^6y^7$ and $-96x^7y^6$ of the expression $72x^6y^7 - 96x^7y^{64}$ is $24x^6y^6$.

Now,
$72x^6y^7 = 24x^6y^6 \times 3y$
and
$-96x^7y^6 = 24x^6y^6 \times -4x$

Hence, the expression $72x^6y^7 - 96x^7y^6$ can be factorised as $24x^6y^6(3y - 4x)$.

********** END **********