

Factorizations Ex 7.1 Q1

Answer:

The numerical coefficients of the given monomials are 2 and 12. So, the greatest common factor of 2 and 12 is 2

The common literal appearing in the given monomials is x.

The smallest power of x in the two monomials is 2.

The monomial of the common literals with the smallest powers is x^2 .

Hence, the greatest common factor is $2x^2$.

Factorizations Ex 7.1 Q2

Answer:

The numerical coefficients of the given monomials are 6 and 18. The greatest common factor of 6 and 18 is 6.

The common literals appearing in the two monomials are x and y.

The smallest power of x in the two monomials is 2.

The smallest power of y in the two monomials is 1.

The monomial of the common literals with the smallest powers is x²y.

Hence, the greatest common factor is $6x^2y$.

Factorizations Ex 7.1 Q3

Answer:

The numerical coefficients of the given monomials are 7, 21 and 14. The greatest common factor of 7, 21 and 14 is 7

The common literal appearing in the three monomials is x.

The smallest power of x in the three monomials is 1.

The monomial of the common literals with the smallest powers is x.

Hence, the greatest common factor is 7x.

Factorizations Ex 7.1 Q4

Answer:

The numerical coefficients of the given monomials are 42 and 63. The greatest common factor of 42 and 63 is 21.

The common literals appearing in the two monomials are $\boldsymbol{x}, \, \boldsymbol{y}$ and $\boldsymbol{z}.$

The smallest power of x in the two monomials is 2.

The smallest power of y in the two monomials is 1.

The smallest power of z in the two monomials is 1.

The monomial of the common literals with the smallest powers is x²yz.

Hence, the greatest common factor is 21x²yz.