Name : _____

GCF - Polynomials

Sheet 3

Find the greatest common factor for each pair of polynomials.

1) $66a^4b^8(c - d), 11a^3(c - d)^5$

GCF = _____

2) $30xy(a^4 - b^4), 10x^3y^2(a^2 + b^2)^2$

GCF = _____

3) $63m^2n(m^2 - 5m + 6), 21(m^2 - 7m + 10)$

GCF = _____

4) $72(x^2 - x - 1)^4, 12(x^2 - x - 1)^6$

GCF = _____

5) $(a + b)^2, (a + b)^6$

GCF = _____

$p^2 + 12pq + 16q^2)$

GCF = _____

7) $6x^2(x + y)^4, 3x(x$

$3d)^3$

GCF = _____

GCF = _____

9) $42(m - n)^3, 54(m - n)^5$

GCF = _____

10) $(q + r)^2, (q + r)^5, (q^2 - r^2)$

GCF = _____

Name : _____

Answer key

GCF - Polynomials

Sheet 3

Find the greatest common factor for each pair of polynomials.

1) $66a^4b^8(c - d), 11a^3(c - d)^5$

GCF = **$11a^3(c - d)$**

2) $30xy(a^4 - b^4), 10x^3y^2(a^2 + b^2)^2$

GCF = **$10xy(a^2 + b^2)$**

3) $63m^2n(m^2 - 5m + 6), 21(m^2 - 7m + 10)$

GCF = **2**

4) $72(x^2 - x - 1)^4, 12(x^2 - x - 1)^6$

$(x^2 - x - 1)^4$

5) $(a + b)^2, (a + b)^6$

$p^2 + 12pq + 16q^2)$

GCF = _____

$12pq + 16q^2)$

7) $6x^2(x + y)^4, 3x(x$

$3d)^3$

GCF = **$3x(x + y)$**

GCF = **$(2c + 3d)$**

9) $42(m - n)^3, 54(m - n)^5$

GCF = **$6(m - n)^3$**

10) $(q + r)^2, (q + r)^5, (q^2 - r^2)$

GCF = **$(q + r)$**