

Factoring Polynomials - in class practice

Factor the common factor out of each expression.

1) $35n^2 + 42n - 28$

$7(5n^2 + 6n - 4)$

2) $25n - 35n^2 - 25n^5$

$5n(5 - 7n - 5n^4)$

3) $64xy + 24x^3y^3 + 40x^2y^3$

$8xy(8 + 3x^2y^2 + 5xy^2)$

4) $-35uv^6 + 42u^2v^5 + 35uv^4$

$7uv^4(-5v^2 + 6uv + 5)$

Factor each completely.

5) $k^2 - 12k + 32$

$(k - 8)(k - 4)$

6) $x^2 - 9x + 14$

$(x - 7)(x - 2)$

7) $v^2 - 5v - 14$

$(v + 2)(v - 7)$

8) $p^2 - 14p + 48$

$(p - 6)(p - 8)$

9) $x^2 + 4x - 60$

$(x + 10)(x - 6)$

10) $x^2 + 18x + 81$

$(x + 9)^2$