

Gr 10 Factoring Review #2

Factor the common factor out of each expression.

1) $-45x - 18x^2 + 36x^3$

$$9x(-5 - 2x + 4x^2)$$

2) $-5x^4yz^8 - 5xyz^8 - 10xyz^7$

$$-5xyz^7(x^3z + z + 2)$$

Factor each completely.

3) $n^2 + 11n + 18$

$$(n+9)(n+2)$$

4) $4m^2 + 33m + 54$

$$4m^2 + 9m + 24m + 54$$

$$m(4m+9) + 6(4m+9)$$

$$(4m+9)(m+6)$$

216	1
108	2
72	3
54	4
27	8
24	9

5) $x^2 - 81$

$$(x+9)(x-9)$$

6) $4k^2 + 40k + 84$

$$4(k^2 + 10k + 21)$$

$$4(k+3)(k+7)$$

7) $40k^2 + 130k - 225$

360	1
36	10

$$5(8k^2 + 26k - 45)$$

$$5(8k^2 + 36k - 10k - 45)$$

$$5(4k(2k+9) - 5(2k+9))$$

$$5(2k+9)(4k-5)$$

8) $125x^2 - 45$

$$5(25x^2 - 9)$$

$$5(5x+3)(5x-3)$$