

Gr 10 Factoring Review Quiz

Date _____

Factor the common factor out of each expression.

1) $16x^5 - 16x^2 - 72x$

$$8x(2x^4 - 2x - 9)$$

2) $-9h^7j^7k + 45h^{10} - 90h^8j$

$$-9h^7(j^7k - 5h^3 + 10hj)$$

Factor each completely.

3) $n^2 - 81$

$$(n+9)(n-9)$$

4) $x^2 - 49$

$$(x+7)(x-7)$$

5) $27k^2 - 300$

$$3(9k^2 - 100)$$

$$3(3k+10)(3k-10)$$

6) $4n^2 - 9$

$$(2n+3)(2n-3)$$

7) $v^2 + 16v + 63$

$$(v+9)(v+7)$$

8) $m^2 + 9m$

$$m(m+9)$$

9) $3n^2 + 12n - 96$

$$3(n^2 + 4n - 32)$$

$$3(n+8)(n-4)$$

10) $6n^2 - 96n + 378$

$$6(n^2 - 16n + 63)$$

$$6(n-9)(n-7)$$

11) $5v^2 - 32v - 21$

$$5v^2 - 35v + 3v - 21$$

$$5v(v-7) + 3(v-7)$$

$$(5v+3)(v-7)$$

12) $3n^2 - 31n + 10$

$$3n^2 - 30n - 1n + 10$$

$$3n(n-10) - 1(n-10)$$

$$(3n-1)(n-10)$$

30	1
15	2
10	3
6	5

13) $27x^2 + 270x$

$$27x(x+10)$$

14) $18n^2 + 54n + 28$

$$2(9n^2 + 27n + 14)$$

$$2(9n^2 + 21n + 6n + 14)$$

$$2(3n(3n+7) + 2(3n+7))$$

$$2(3n+2)(3n+7)$$

126	1
63	2
42	3
21	6

105	1
35	3
21	5