

Factoring WS - Day 2

Factor each completely.

1) $7r^2 - 46r - 21$

$(7r + 3)(r - 7)$

2) $7n^2 + 33n - 54$

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

3) $9v^4 - 3v^3$

$3v^3(3v - 1)$

4) $6a^3 - 10a^2 - 56a$

$2a(3a + 7)(a - 4)$

5) $7x^2 - 45x - 28$

$(7x + 4)(x - 7)$

6) $20k^3 + 66k^2 - 108k$

$2k(2k + 9)(5k - 6)$

7) $60a^2 - 54a - 54$

$6(5a + 3)(2a - 3)$

8) $6b^2 - 11b + 3$

$(2b - 3)(3b - 1)$

9) $4a^3 - 20a^2 + 25a$

$a(2a - 5)^2$

10) $18v^2 + 40v + 8$

$2(v + 2)(9v + 2)$

11) $p^2 - 7p + 10$

$(p - 5)(p - 2)$

12) $n^4 - 3n^3$

$n^3(n - 3)$

$$13) 3r^4 - 33r^3 + 30r^2$$
$$3r^2(r - 10)(r - 1)$$

$$14) x^3 + 3x^2$$
$$x^2(x + 3)$$

$$15) 9k^2 - 1$$
$$(3k + 1)(3k - 1)$$

$$16) 9n^2 - 16$$
$$(3n + 4)(3n - 4)$$

$$17) 9a^2 - 4$$
$$(3a + 2)(3a - 2)$$

$$18) 100v^2 - 36$$
$$4(5v + 3)(5v - 3)$$

$$19) 2x^2 - 8$$
$$2(x + 2)(x - 2)$$

$$20) 4k^2 - 25$$
$$(2k + 5)(2k - 5)$$

$$21) 4m^2 - 12m + 9$$
$$(2m - 3)^2$$

$$22) 16m^2 - 40m + 25$$
$$(4m - 5)^2$$

$$23) 2x^2 - 8x + 8$$
$$2(x - 2)^2$$

$$24) 4n^2 + 32n + 64$$
$$4(n + 4)^2$$