

**SM2 unit 5 test review—factoring**

1. Writing the answer as a multiplication problem. Find GCF then use grouping.
2.  $5x(2x - 1)$
3.  $-3(4w^3 - 7)$
4.  $4pq(3p^4 + 9p^3 + 2)$
5.  $(3m + 1)(5m^2 - 2)$
6.  $(t - 2)(4r + 1)$
7.  $2n(n^2 + 6)(3n + 5)$
8. When there are no numbers that times to a and c but also add to b.
9.  $(v - 7)(v + 3)$
10.  $(w + 5)(w - 2)$
11. prime
12.  $(m - 3)^2$  or  $(m - 3)(m - 3)$
13.  $5(p^2 - 5p + 12)$
14.  $3r(r + 7)(r - 2)$
15.  $-4(k + 6)(k - 1)$
16.  $(4n + 3)(n - 2)$
17. prime
18.  $(2q - 5)(q - 4)$
19.  $(3a + 4)^2$  or  $(3a + 4)(3a + 4)$
20.  $-5(2y + 1)(y - 4)$
21.  $(2x + 1)(3x - 4)$
22.  $2(x + 6)(2x + 3)$
23.  $(4k - 1)(2k + 9)$
24. both terms are perfect squares and it is a subtract question
25.  $(z + 2)(z - 2)$
26. prime
27.  $(7m - 4)(7m + 4)$
28.  $(8 + t)(8 - t)$
29.  $3(5u + 2)(5u - 2)$
30.  $2(3x + 10)(3x - 10)$