SM2H 3.3 Answers

1. $7n(7n + 2)$
2. $-2(x^2 - 2x + 3)$
3. $(2x + 7)(2x^2 - 3)$
4. Prime
5. $2(x + 3)(x + 4)$
6. Prime

7. $(5n + 2)(n + 4)$

8. $(2x - 3)(x - 7)$

9. $(3h - 7)(h + 2)$

10. $2(2n + 3)(3n - 1)$

11. Prime

12. $(2x + y)(2x + 7y)$

13. Prime

14. $3k(3k - 4)(k + 3)$

15. Prime

16. $(x + 4y)(9x + 4y)$

17. $-3(3p - 1)(2p - 3)$

18. $(v - 2)(2v - 5)$

19. $(2g - 3)(2g + 5)$

20. $2(3x + 4)(3x - 4)$

21. $-2(6u + 1)(u - 2)$

22. $4p(2p - 1)(p - 9)$

23. $3(d + 6)(d - 2)$

24. $3(2n + 9)(2n - 1)$

25. Answers Vary-
     List the factors of a.
     List the factors of c.
    Try different arrangements
    (guess and check) until you find a
    combination that works.

26. Answers Vary-
     Multiply $a \cdot c$
     Try to find 2 numbers that multiply to get $a \cdot c$
     and add to get b.
     Rewrite and replace the middle term, b with the
     2 numbers that you found.
     Factor by grouping.

27. $\frac{-5}{2}$

28. $\frac{11}{8}$

29. No Solution