

Applications, Factoring, Quadratics and Cubics – Answers

1. $(3a^2 + 1)(4a - 3)$

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

3. $(5x - 8)(7y - 1)$

4. $7(8a - 3y)(4z + c)$

5. $(m - 5n)(z + 3h)(z - 3h)$

6. $(4x - 5)(3y - 7)$

7. $3(5a^2 - 2b)(5c - 3d)$

8. $8x(2x + yd - 2xd - yc)$

9. $5mn(30mz + 10nc - 24mc - 5nz)$

10. $p = -\frac{5}{2}$

11. $n = -\frac{1}{3}$

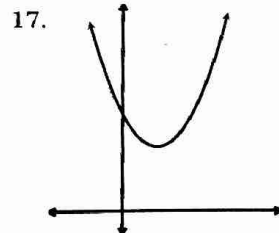
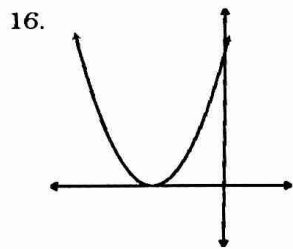
12. $n = \pm \frac{\sqrt{15}}{5}, 2$

13. ~~a. 260 ft~~ ~~b. 10 sec~~ **258 ft + 11 sec.** c. 650 ft

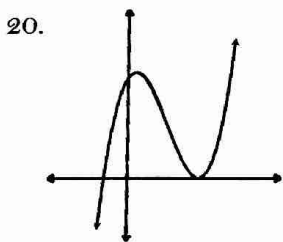
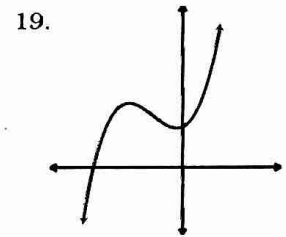
14. factored: $f(x) = 2(x - 2)(x - 4)$ standard: $f(x) = 2x^2 - 12x + 16$

15. factored: $g(x) = -\frac{1}{4}(x + 6)(2x + 3)$ standard: $g(x) = -\frac{1}{2}x^2 - \frac{15}{4}x - \frac{9}{2}$

16-21 answers will vary



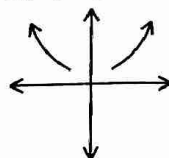
18. Not possible



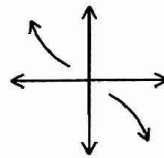
21. Not possible

22. $f(x) = -\frac{3}{20}(2x + 9)(x + 1)(x - 2)$

23. D: 4 LC: 5



24. D: 7 LC: -1



25. D: 5 LC: 4

