PG. 13; # 9-33 odd
37-41 odd

ALGEBRA (SECTION 1.2)

9. $3^5 = \boxed{243}$

11. $2^4 = \boxed{16}$

13. $\left(\frac{2}{3}\right)^3 = \boxed{\frac{8}{27}}$

15. $(0.4)^6 = \boxed{.004096}$

17. $20 - 2 \cdot 3^2$

$20 - 2 \cdot 9$

$20 - 18 = \boxed{2}$

19. $\frac{(6^2 - 3^3)}{2}$

$\frac{(36 - 27)}{2} = \boxed{\frac{9}{2}}$

21. $80 - (4-1)^3$

$80 - (3)^3$

$80 - 27 = \boxed{53}$

23. $\frac{\frac{6^4}{3^2}}{9} = \frac{\frac{1296}{9}}{9}$

$= \frac{144}{9} = \boxed{16}$

25. $(s+t)^3$

$(4+8)^3$

$12^3 = \boxed{1728}$

27. $\frac{(st)^2}{st^2} = \frac{(4 \cdot 8)^2}{4 \cdot 8^2}$

$= \frac{1024}{4 \cdot 64} = \frac{1024}{256} = \boxed{4}$

29. $(t-s)^5$

$(8-4)^5$

$4^5 = \boxed{1024}$

31. $2st^2 - s^2$

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

$2(4)(64) - (16)$

$512 - 16 = \boxed{496}$

33. $\frac{(3s)^3 t + t}{s}$

$\frac{(3 \cdot 4)^3 (8) + 8}{4}$

$\frac{12^3 \cdot 8 + 8}{4} = \frac{1728 \cdot 8 + 8}{4} = \frac{13824 + 8}{4} = \boxed{3458}$

37. $2[(8-4)^5 \div 8]$

$2[(4)^5 \div 8]$

$2[1024 \div 8]$

$2[128]$

$\boxed{256}$

39. $10-(2^3+4) \div 3-1$

$10-(8+4) \div 3-1$

$10-12 \div 3-1$

$10-4-1$

$\boxed{5}$

41. $3[42-2(10^2-9^2)]$

$3[42-2(100-81)]$

$3[42-2(19)]$

$3[42-38]$

$3[4] = \boxed{12}$