

Problem Set 93 — Even Answers

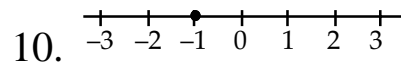
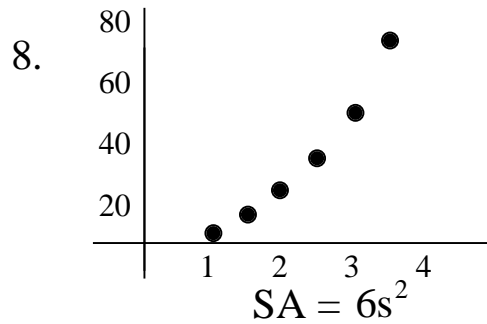
2. 373°C

4a. 2.690

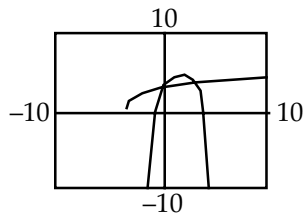
b. 6.310×10^{-4}

6. (3.5, 185), (4.4, 160), (4.3, 115)
 (5.4, 115), (5.4, 90), (6.3, 63)
 (6.5, 35)

$$S = -44.686 P + 337.535$$



12. $T_D = 3$ $B = 14$



14. $(-0.145, 2.690), (1.888, 3.211)$

16. $Y_1 = 2 + \sqrt{0.25(x+2)^2 - 4}$
 $Y_2 = 2 - \sqrt{0.25(x+2)^2 - 4}$

18a. $x \approx 3.308$

b. $x \approx 1.436$

20. $x = 3$

22. $a_n = \frac{1}{2} a_{n-1}, \quad a_1 = 160$
 $a_{10} = \frac{5}{16}$

24. $x = -2, 0, \frac{1}{3}$

26. $2^{\frac{56}{15}}$

28. $25 + 24i$

30. $A = \frac{5\sqrt{11}}{4} \text{ cm}^2 \approx 4.146 \text{ cm}^2$