

Exercise X

1. 1.73 in., 58° , 69° ; 1.84 in., 2.02 in., 53° .
2. 1.94 in., 1.54 in., 63° ; 1.73 in., 1.93 in., 53° , 64° .
4. 1.9 in., 1.49 in., each side = 1.77 in.; angles are 57° , 57° , 66° .
6. 113° , 1.64 in. 9. 1.55 in.
10. $DA = 3.46$ in., $DB = 2.21$ in., $A = 38^\circ$, $B = 76^\circ$, $D = 66^\circ$.

Exercise XI

8. Each segment = 1.63 in.
10. $EC = 1.13$ in., $ED = 2.71$ in., $BEA = 92^\circ$, $BEC = 114^\circ$, $CED = 80^\circ$, $DEA = 74^\circ$.

Exercise XII

1. 1.85 in., 90° , 45° .
2. 1.81 in., 67° , 113° , $56\frac{1}{2}^\circ$.
3. 2.57 in., 1.17 in., 90° , 25° .
4. 2.24 in., 1.55 in., 50° , 130° .
7. 1.93 in.
8. 2.84 in., 1.91 in.
10. 1.25 dm., .62 dm.

Exercise XIII

1. $A = 106^\circ$, $C = 96^\circ$, $D = 57^\circ$.
2. $CD = 1.65$, $C = 83^\circ$, $D = 77^\circ$.
3. $AD = 2.91$ in., $DC = 2.24$ in.
5. $A = 118^\circ$, $B = 91^\circ$, $C = 89^\circ$, $D = 62^\circ$.
6. $BC = 4.1$ cm., $CD = 3.67$ cm.
7. $B = 131^\circ$, $C = 62^\circ$, $D = 131^\circ$.
8. 4.07 in.
9. $DC = 2.06$ in., $EF = 3.03$ in.
10. 1.71 in.

Exercise XIV

2. 10.8 sq. in.
3. 4.56 sq. in.
5. 15.9 sq. in.
7. $11\frac{1}{4}$ sq. in.
8. $8\frac{5}{8}$ sq. in.
10. (1) 800 sq. ft., (2) 1250 sq. ft., (3) 940 sq. ft., 5980 sq. ft.

Miscellaneous Exercises

1. $BC = 1.5$ in., $CD = 2$ in., $ABC = 110^\circ$, $ADC = 110^\circ$, $BCD = 70^\circ$.
3. 37° , 53° , 90° .
4. 600 ft.
5. A rhombus. 4.1 in.
6. 4.5 ft., 53° .
9. 72° , 72° , 36° .
12. 34.1 mi., 85° .
13. 248,376 sq. ft.
14. 2.56 in., 2.7 in.
16. 450 ft.
18. 10.6 mi.
19. 59.6 ft.
20. 2.86 mi.
21. 309 mi., 44° .
22. 64 ft.
23. 136 ft.
25. 4.5 in., 5.42 in., 6.25 in.
26. 58° .
27. 47.7 ft.
28. 4 mi.
29. 6.928 sq. in., 1.732 sq. in.
30. 102 mi.
31. 134,349 sq. yds.
32. 4.36 mi.
33. 498 yds., 158,535 sq. yds.
35. 19.6 yds.
36. 568 yds.
37. 18.9 ft., 17.2 ft.
38. 179 ft.
39. 3.34 mi.