

# ANSWERS

## PART I

### Exercise I

1. 1.88 in., 1.08 in.

7. 1.26 in.

### Exercise II

3. 6.09 in.,  $D = 34^\circ$ ,  $E = 36^\circ$ .

9.  $77^\circ$ ,  $103^\circ$ .

### Exercise III

1.  $121^\circ$ ,  $43^\circ$ .

4.  $A = 56^\circ$ ,  $B = 51^\circ$ ,  $C = 73^\circ$ .

7.  $AD = 3.77$  in.,  $BD = 2.82$  in.,  $A = 45^\circ$ ,  $B = 71^\circ$ ,  $D = 64^\circ$ .

8.  $30^\circ$ ,  $90^\circ$ ,  $15^\circ$ ,  $120^\circ$ ,  $60^\circ$ .

9.  $3\frac{1}{2}$  in.

10.  $66^\circ$ ,  $114^\circ$ .

### Exercise IV

3. 100 ft., 207 ft., 50 ft.

4. 264 ft.

6. 6.71 mi

7. 20 ft.

8. 5.14 mi.

9. 49.5 ft., 51.3 ft.,  $76^\circ$ ,  $69^\circ$ .

10. 6.4 mi., 7.81 mi., 8.94 mi., 10 mi.

### Exercise V

7. 9.57 in.

9.  $AD = 3.43$  in.,  $DB = 2.05$  in.,  $A = 36^\circ$ ,  $B = 84^\circ$ .

10.  $BC = 2.9$  in.,  $DE = 1.45$  in.

### Exercise VI

5. 13 mi.

10. 5.27 in., 5.46 in., 3.76 in., 3.9 in.

### Exercise VII

7.  $AD = BC = 2.6$  in.

8. 1.3 in.

9. 1128 ft.

### Exercise VIII

5. Each perpendicular = 1.47 in.

9. 32.7 mi.

10. 17.7 mi.

### Exercise IX

1. 2.06 in.

3. 1.08 in., 1.94 in.

4. 1.8 in., 1.39 in., 1.55 in.

5.  $A = 64^\circ$ ,  $B = 55^\circ$ ,  $C = 61^\circ$ .

6. 1.56 in., 1.26 in.

7.  $49^\circ$ ,  $59^\circ$ ,  $72^\circ$ .

8.  $53^\circ$ ,  $37^\circ$ ,  $90^\circ$ .

9.  $25^\circ$ ,  $67^\circ$ ,  $90^\circ$ .

10. 675 ft.,  $24^\circ$ ,  $19^\circ$ .