

Solutions: 6.5 (odd-numbered problems)

1. By the Law of Cosines,

$$x = \sqrt{21^2 + 42^2 - 2(21)(42) \cos 39} \approx 28.881$$

3. By the Law of Cosines,

$$x = \sqrt{25^2 + 25^2 - 2(25)(25) \cos 140} \approx 46.9846$$

27. By the Law of Cosines, with d denoting the distance requested,

$$d = \sqrt{2.82^2 + 3.56^2 - 2(2.82)(3.56) \cos 40.3} \approx 2.30496$$

37. By the Law of Cosines, with d denoting the distance requested,

$$d = \sqrt{380^2 + 420^2 - 2(380)(420) \cos 30} \approx 210.629$$