

BLM 2–7 Section 2.3 Extra Practice

1. a) 4.0 cm b) 5.3 m 2. a) 43° b) 125°

3. a) 31° b) 6.4 cm

4. a) $\angle F = 105^\circ$; DF = 8.3 cm; EF = 11.7 cm

b) $\angle N = 77^\circ$; $\angle M = 43^\circ$; NO = 6.3 m

5. a) no solution

b) $\angle Q = 7^\circ$; $\angle R = 70^\circ$; PR = 1.6 cm

c) First triangle: $\angle F = 59^\circ$; $\angle E = 81^\circ$; DF = 9.2 cm

Second triangle: $\angle F = 121^\circ$; $\angle E = 19^\circ$; DF = 3.0 cm

d) First triangle: $\angle T = 77^\circ$; $\angle S = 38^\circ$; RT = 2.7 mm

Second triangle: $\angle T = 103^\circ$; $\angle S = 12^\circ$; RT = 0.9 mm

6. 435 cm^2