

Practise, Apply, Solve 6.2, page 522

- 80.2 m
- 3.6 m
- (a) 16.6 cm (b) 21.5 cm
- 6.4 cm, 49.0 cm²
- 60 cm
- 135°
- (a) 15 cm (b) 38 cm (c) 20 cm (d) 65°
- Example:* solve $\triangle ABC$ where $a = 10.4$, $b = 6$, $\angle B = 19^\circ$, and $\angle C = 23^\circ$: $C = 7.2$, $\angle A = 138^\circ$
- 5.1 m, 6.1 m
- (a) 53.3 m (b) 53.1 m
- (a) The *Argus* is 85.5 nautical miles from the lifeboat; the *Baffin* is 75.1 nautical miles.
(b) The *Baffin* will arrive first.
- 540 m
- Plane *Abel* will land first.
- Tower *A* is 31.5 km from the fire; Tower *B* is 22.3 km from the fire.
- 21.1 km
- (a) 44.299° (b) 5.56 km (c) 1.51 km
- 8.34 km
- (a) 30.7° (b) 1258.875 cm² (c) 2707.5 cm³
- A diagram is essential; use primary trigonometric ratios if the triangle is a right triangle; use sine law if two angles and any side or if two sides and an angle are given; use cosine law if two sides and contained angle or the other side is known.
- (a) 2.4 km
(b) The balloon on the left 209 m higher.