

Section 8.1 Answers

page 775

- 14.) $a = 2.18$; $c = 6.39$; $B = 70^\circ$
- 18.) $a = 6.43$; $b = 7.66$; $B = 50^\circ$
- 20.) $c = 8.25$; $A = 14^\circ$; $B = 76^\circ$
- 24.) 19.5° and 70.5°
- 26.) 15.9°
- 28.) 14°
- 32.) 14.9°

page 632

- 60.) 83.91 ft
 - 64.) 837.98 ft
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Section 8.2 Answers

- 10.) $a = 2.84$; $b = 2.58$; $C = 95^\circ$
 - 16.) $a = 11.82$; $c = 9.19$; $C = 50^\circ$
 - 30.) there are 2 triangles, $C = 74.6^\circ$ or $C = 105.4^\circ$. When $C = 74.6^\circ$, $a = 2.83$ and $A = 65.4^\circ$; when $C = 105.4^\circ$, $a = 1.77$ and $A = 34.6^\circ$
 - 32.) no triangle
 - 38.) 76.6 ft
 - 42.) 1053.147 ft
 - 44.) actual time of trip was $(50+70)/250 = 0.48$; $c = 118.67$ mi; so the time it should have taken was $118.67/250 = 0.4747$. How much longer is that?
 - 48.) [a] 3.21 mi, [b] 3.78 mi, [c] 3.1 miles
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Section 8.3 answers

- 10.) $a = 2.05$; $C = 103.1^\circ$; $B = 46.9^\circ$
 - 12.) $b = 3.19$; $A = 12.4^\circ$; $C = 148.0^\circ$
 - 14.) $A = 125.1^\circ$; $B = 30.8^\circ$; $C = 24.1^\circ$
 - 16.) $A = 68.0^\circ$; $B = 44.0^\circ$; $C = 68.0^\circ$
 - 34.) [a] 227.56 miles; [b] 149.7°
 - 38.) [a] 42.58 ft; [b] 38.85 ft; [c] 85.2°
 - 40.) 501.3 ft and 518.4 ft
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Section 8.4 answers

- 6.) 3
- 8.) 1.71

- 10.) 8.18
- 12.) 5.56
- 34.) 0.69 in^2
- 38.) 15.27 in^2