

Math 3301 Foundations of Geometry
Unit V Practice Test

Solutions

1. $\sin A = \frac{4}{5}$ $\cos A = \frac{3}{5}$ $\sin B = \frac{3}{5}$ $\cos B = \frac{4}{5}$
2. $\sin A = \frac{3}{4}$ $\cos A = \frac{\sqrt{7}}{4}$ $\sin B = \frac{\sqrt{7}}{4}$ $\cos B = \frac{3}{4}$
3. $\frac{2\sqrt{2}}{3}$
4. 0.4099
5. $x \approx 26.5$ m, $y \approx 33.9$ m
6. $\sin A = \frac{4}{5}$ $\cos A = \frac{3}{5}$
7. 12.7°
8. (a) 53° (b) 45°
9. (a) $m\angle B = 60^\circ$, $a \approx 3$, $c \approx 7$ (b) $m\angle A \approx 53^\circ$, $m\angle B \approx 37^\circ$, $a \approx 16$
(c) $m\angle A = 40.2^\circ$, $m\angle B \approx 49.8^\circ$, $b \approx 7.3$ (d) $m\angle B = 60^\circ$, $a \approx 3$, $b \approx 7$
10. Approximately 8.4 miles from Bravo and 6.6 miles from Alpha
11. Approximately 58.2 m
12. Approximately 37.5°
13. Approximately 28 ft
14. Approximately 236 ft