

Law of Cosines - Matching Worksheet

Write the letter of the answer that matches the problem.

- _____ 1. In $\triangle ABC$, side $a = 13$, side $c = 17$ and $m\angle B = 12^\circ$.
Find side 'b' to the nearest integer. a. 27.14
- _____ 2. In a rhombus whose side measures 20 and the
smaller angle is 165° ; find the length of the larger
diagonal, to the nearest tenth. b. 17
- _____ 3. In $\triangle PQR$, side $q = 2$, side $r = 9$ and $m\angle Q = 24^\circ$.
Find side 'q' to the nearest integer. c. 16
- _____ 4. In a rhombus whose side measures 28 and the
smaller angle is 58° ; find the length of the larger
diagonal, to the nearest tenth. d. 22
- _____ 5. In $\triangle XYZ$, side $x = 14$, side $y = 16$ and $m\angle Z = 66^\circ$.
Find side 'z' to the nearest integer. e. 5
- _____ 6. In a rhombus whose side measures 18 and the
smaller angle is 172° ; find the length of the larger
diagonal, to the nearest tenth. f. 39.65
- _____ 7. In $\triangle LMN$, side $m = 19$, side $n = 26$ and $m\angle L = 42^\circ$.
Find side 'l' to the nearest integer. g. 35.9
- _____ 8. In a rhombus whose side measures 30 and the
smaller angle is 53° ; find the length of the larger
diagonal, to the nearest tenth. h. 26.7
- _____ 9. In $\triangle TUV$, side $t = 21$, side $v = 12$ and $m\angle U = 79^\circ$.
Find side 'u' to the nearest integer. i. 7.2

