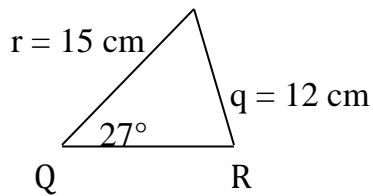


1. Correct the errors in the solution to the following question. Record answers and show all work on separate paper.

QUESTION: Given $Q = 27^\circ$, $r = 15$ cm, $q = 12$ cm. Solve $\triangle PQR$.

SOLUTION: P



$$\frac{\sin R}{15} = \frac{\sin 27^\circ}{12}$$

$$\sin R = 0.567488$$

$$R = 34.575^\circ$$

$$R = 35^\circ$$

$$P = 180^\circ - 27^\circ - 35^\circ$$

$$P = 118^\circ$$

$$p^2 = q^2 + r^2 - 2qr \cos P$$

$$p^2 = 12^2 + 15^2 - 2(12)(15) \cos 118^\circ$$

$$p^2 = 369 - 169$$

$$p^2 = 200$$

$$p = 14.1 \text{ cm}$$

$$\therefore P = 118^\circ, Q = 27^\circ, R = 35^\circ, p = 14.1 \text{ cm}, q = 12 \text{ cm}, r = 15 \text{ cm}.$$