

Name _____

Date _____

Area of Triangle Using Trigonometry - Matching Worksheet

Write the letter of the answer that matches the problem.

- _____ 1. In ΔPQR , $PQ = 12$, $PR = 13$, and $m\angle P = 46^\circ$. Find the area of ΔABC , to the nearest tenth of a square unit. a. 144.3
- _____ 2. In an isosceles Δ , the two equal sides each measure 18 meters, and they include an angle of 63° . Find the area of the isosceles triangle, to the nearest square meter. b. 102.6
- _____ 3. In ΔABC , $AB = 25$, $AC = 10$, and $m\angle A = 39^\circ$. Find the area of ΔABC , to the nearest tenth of a square unit. c. 78.7
- _____ 4. In an isosceles Δ , the two equal sides each measure 8 meters, and they include an angle of 97° . Find the area of the isosceles triangle, to the nearest square meter. d. 8.7
- _____ 5. In ΔXYZ , $XY = 12$, $XZ = 23$, and $m\angle X = 48^\circ$. Find the area of ΔXYZ , to the nearest tenth of a square unit. e. 56.1
- _____ 6. In an isosceles Δ , the two equal sides each measure 6 meters, and they include an angle of 29° . Find the area of the isosceles triangle, to the nearest square meter. f. 65.5
- _____ 7. In ΔEFG , $EF = 20$, $EG = 8$, and $m\angle E = 55^\circ$. Find the area of ΔABC , to the nearest tenth of a square unit. g. 31.8

