

PreCalculus
WS: 6.1 – 6.2 Extension

Name _____
Date _____ **Block** _____

Find the area of the triangle.

1.) $A = 47^\circ, b = 32\text{ft}, c = 19\text{ft}$

2.) $A = 52^\circ, b = 4\text{m}, c = 21\text{m}$

3.) $B = 101^\circ, a = 10\text{cm}, c = 22\text{cm}$

4.) $C = 112^\circ, a = 1.8\text{in}, b = 5.1\text{in}$

5.) A triangular plot of land has sides that measure 5 meters, 7 meters, and 10 meters. What is the area of this plot of land, to the nearest tenth of a square meter?

6.) A farmer has determined that a crop of strawberries yields a yearly profit of \$1.50 per square yard. If strawberries are planted on a triangular piece of land whose sides are 50 yards, 75 yards, and 100 yards, how much profit, to the nearest dollar, would the farmer expect to make from this piece of land during the next harvest?

7.) A farmer has a triangular field with sides of 240 feet, 300 feet, and 360 feet. He wants to apply fertilizer to the field. If one 40-pound bag of fertilizer covers 6,000 square feet, how many bags must he buy to cover the field?

8.) A floral design on a floor is made up of 16 tiles which are triangular, the sides of the triangle being 9 cm, 28 cm and 35 cm (see Fig. 12.18). Find the cost of polishing the tiles at the rate of \$0. 50 per square centimeter.

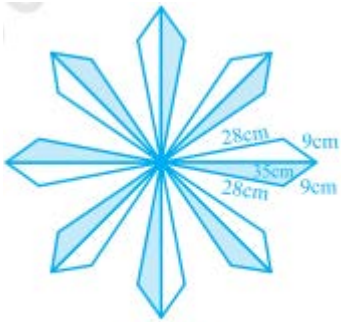


Fig. 12.18

9.) An umbrella is made by stitching 10 triangular pieces of cloth of two different colors (see Fig. 12.16), each piece measuring 20 cm, 50 cm and 50 cm. How much cloth of each color is required for the umbrella?



Fig. 12.16

10.) A parking lot has the shape of a parallelogram. The lengths of two adjacent sides are 70 meters and 100 meters. The angle between the two sides is 70 degrees. What is the area of the parking lot?

