Name: _____

Practice Geometry Quiz PR-3 and PR-4

1) The expression $\sqrt{27} + \sqrt{12}$ is equal to

A) $5\sqrt{6}$ B) $\sqrt{39}$ C) $5\sqrt{3}$ D) $13\sqrt{3}$

2) The expression $6\sqrt{2} + \sqrt{32}$ is equivalent to

A) $7\sqrt{34}$ B) $6\sqrt{34}$ C) 20 D) $10\sqrt{2}$

3) The expression $4\sqrt{2} - \sqrt{32}$ is equivalent to

A) $8\sqrt{2}$ B) $4\sqrt{2}$ C) 0 D) $-8\sqrt{2}$

4) The side of a square is $\sqrt{18}$. What is the area of the square?

A) 36 B) 18 C) $4\sqrt{18}$ D) 9

5) If the sides of a rectangle measure $\sqrt{12}$ and $\sqrt{3}$, what is the area of the rectangle?

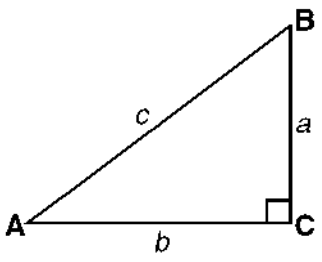
A) $4\sqrt{15}$ B) $\sqrt{30}$ C) 36 D) 6

6) If the sides of a rectangle measure $3\sqrt{2}$ and $5\sqrt{2}$, what is the area of the rectangle?

A) 30 B) 60 C) 16 D) $15\sqrt{2}$

Questions 7 and 8 refer to the following:

In the diagram below, $\triangle ABC$ is a right triangle with right angle C.



7) If $a = 12$ and $b = 16$, then $c =$?.

8) If $a = \sqrt{13}$ and $b = 6$, then $c =$?.

9) If point A is 6 meters due east of point C and point B is 8 meters due north of point C, find the distance, in meters, between A and B.

10) Find the coordinates of the midpoint of the line segment whose endpoints are (2,-6) and (10,4).

11) What is the midpoint of the line segment that connects the points (1,2) and (6,7)?

12) Segment AB has endpoints A(-1,3) and B(0,7). What is the length of $\overline{AB}$?

A) $\sqrt{101}$ B) $\sqrt{5}$ C) $\sqrt{10}$ D) $\sqrt{17}$

13) Find, in simplest radical form, the distance between points (-1,5) and (-7,3).