1. Heron's formula is used to calculate the:
A) Perimeter
B) Area
C) Radius
D) Angles (B)
Explanation: Heron's formula calculates the area of a triangle.

2. The semi-perimeter 's' of a triangle with sides 10, 14, and 16 cm is:
A) 20 cm
B) 18 cm
C) 15 cm
D) 22 cm (A)
Explanation: The semi-perimeter s = (10 + 14 + 16) / 2 = 20cm

3. For sides 6 cm, 8 cm, and 10 cm, the area is:
A)30cm^2
B) 24cm^2
C) 36cm^2
D) 32cm^2 (A)
Explanation: The area is 30 cm^2 using Heron's formula.

4. A triangle with sides 7 cm, 8 cm, and 9 cm has an area of:
A)26 cm^2
B) 24 cm^2
C) 30 cm^2
D) 20 cm^2 (A)
Explanation: The area is 26 cm^2 for these sides.

5. The area of a triangle with sides 5 cm, 12 cm, and 13 cm is:
A) 30 cm^2
B) 25 cm^2
C) 15 cm^2
D) 20 cm^2 (A)
Explanation: The area is 30 cm^2 for these sides.

6. What is the formula for Heron's formula?
A) Area = 1/2 x base x height
B) Area = s(s-a) (s - b)(s - c)
C) Area = πr^2
D) Area = a^2 + b^2 (B)
Explanation: Heron's formula is Area= sqrt(s(s - a)(s - b)(s - c)) .

7. The semi-perimeter 's' is half of the triangle's:
A) Area
B) Perimeter
C) Height
D) Circumference (B)
Explanation: The semi-perimeter is half of the perimeter.

8. A triangle with sides 10 cm, 12 cm, and 15 cm has an area of:
A) 50 cm^2
B) 84 cm^2
C) 90 cm^2
D) 100 cm^2 (B)
Explanation: The area is 84 cm^2 using Heron's formula.

9. What is the area of an equilateral triangle with side 6 cm?
A) 9√3 cm^2
B) 18 cm^2
C) 15 cm^2
D) 12 cm^2 (A)
Explanation: The area is 9/√3 cm^2.

10. For a triangle with sides 13 cm, 14 cm, and 15 cm, the semi-perimeter 's' is:
A) 21 cm
B) 22 cm
C) 28 cm
D) 30 cm (A)
Explanation: The semi-perimeter is 21 cm for these sides.