

NAME: \_\_\_\_\_

1. Find the area of a triangle if its three sides are 7 inches, 8 inches, and 9 inches. Use Heron's formula  $A = \sqrt{S(S-a)(S-b)(S-c)}$ , where  $a$ ,  $b$ , and  $c$  are the lengths of the sides and  $S = \frac{a+b+c}{2}$ .

[A] 4.9 in.<sup>2</sup>                      [B] 24 in.<sup>2</sup>  
[C] 7.75 in.<sup>2</sup>                    [D] 26.83 in.<sup>2</sup>

2. Find the area of a triangle if its three sides are 5 inches, 6 inches, and 7 inches. Use Heron's formula  $A = \sqrt{S(S-a)(S-b)(S-c)}$ , where  $a$ ,  $b$ , and  $c$  are the lengths of the sides and  $S = \frac{a+b+c}{2}$ .

[A] 18 in.<sup>2</sup>                      [B] 14.7 in.<sup>2</sup>  
[C] 4.9 in.<sup>2</sup>                    [D] 4.24 in.<sup>2</sup>

3. Find the area of a triangle if its three sides are 8 inches, 9 inches, and 13 inches. Use Heron's formula  $A = \sqrt{S(S-a)(S-b)(S-c)}$ , where  $a$ ,  $b$ , and  $c$  are the lengths of the sides and  $S = \frac{a+b+c}{2}$ .

[A] 5.48 in.<sup>2</sup>                    [B] 35.5 in.<sup>2</sup>  
[C] 30 in.<sup>2</sup>                      [D] 9.17 in.<sup>2</sup>

4. Find the area of a triangle if its three sides are 9 inches, 10 inches, and 15 inches. Use Heron's formula  $A = \sqrt{S(S-a)(S-b)(S-c)}$ , where  $a$ ,  $b$ , and  $c$  are the lengths of the sides and  $S = \frac{a+b+c}{2}$ .

[A] 10.58 in.<sup>2</sup>                    [B] 43.63 in.<sup>2</sup>  
[C] 5.83 in.<sup>2</sup>                    [D] 34 in.<sup>2</sup>

5. Find the area of a triangle if its three sides are 4 inches, 5 inches, and 7 inches. Use Heron's formula  $A = \sqrt{S(S-a)(S-b)(S-c)}$ , where  $a$ ,  $b$ , and  $c$  are the lengths of the sides and  $S = \frac{a+b+c}{2}$ .

[A] 3.46 in.<sup>2</sup>                    [B] 16 in.<sup>2</sup>  
[C] 9.8 in.<sup>2</sup>                    [D] 4 in.<sup>2</sup>

6. Find the area of a triangle if its three sides are 8 inches, 9 inches, and 11 inches. Use Heron's formula  $A = \sqrt{S(S-a)(S-b)(S-c)}$ , where  $a$ ,  $b$ , and  $c$  are the lengths of the sides and  $S = \frac{a+b+c}{2}$ .

[A] 5.29 in.<sup>2</sup>                    [B] 9.49 in.<sup>2</sup>  
[C] 35.5 in.<sup>2</sup>                    [D] 28 in.<sup>2</sup>

[1] D

[2] B

[3] B

[4] B

[5] C

[6] C