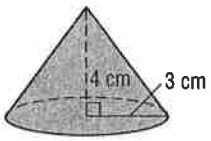
Surface Area of Cones Notes

Lateral Area: $L = \pi r l$

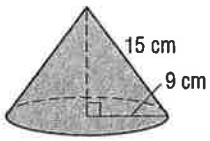
Find the lateral area of each circular cone. Round to the nearest tenth if necessary.

1. 

$l = 5$

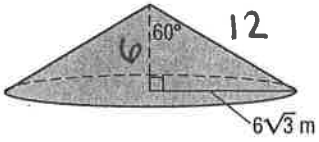
$L = \pi(3)(5)$

$47.1\ cm^2$

2. 

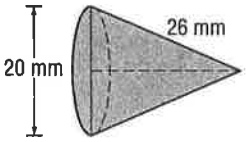
$L = \pi(9)(15)$

$L = 424.1\ cm^2$

3. 

$L = \pi(6\sqrt{3})(12)$

$391.8\ m^2$

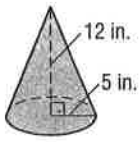
4. 

$r = 10$

$l = 26$

$L = \pi(10)(26)$

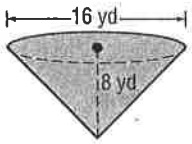
$= 816.8\ mm^2$

5. 

$l = 13$

$L = \pi(5)(13)$

$L = 204.2\ in^2$

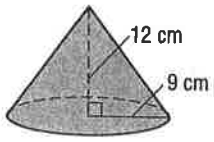
6. 

$L = \pi(8)(8\sqrt{2})$

$L = 284.3\ yd^2$

Surface Area of a Cone: $S = \pi r l + \pi r^2$

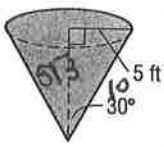
Find the surface area of each cone. Round to the nearest tenth if necessary.

1. 

$l = 15$

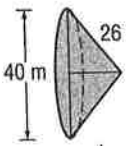
$S = \pi(9)(15) + \pi(9^2)$

$S = 678.6\ cm^2$

2. 

$S = \pi(5)(10) + \pi(5)^2$

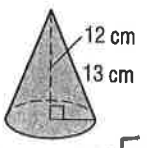
$S = 235.6\ ft^2$

5. 

$r = 20$

$S = \pi(20)(26) + \pi(20)^2$

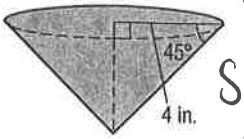
$S = 2890.3\ m^2$

3. 

$r = 5$

$S = \pi(5)(13) + \pi(5^2)$

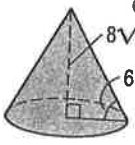
$S = 282.7\ cm^2$

4. 

$l = 4\sqrt{2}$

$S = \pi(4)(4\sqrt{2}) + \pi(4^2)$

$= 121.4\ in^2$

6. 

$r = 8$

$l = 16$

$S = \pi(8)(16) + \pi(8)^2$

$= 603.2$