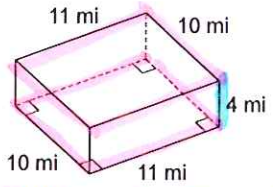
Geometry Name Key

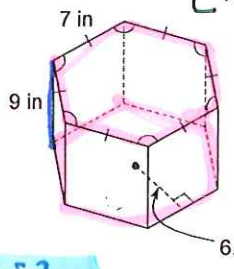
Surface Area Test Review

Date 3-31-16 Period ____

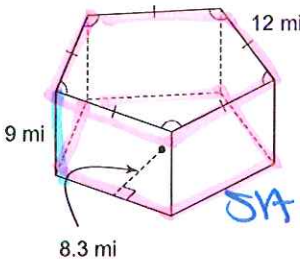
Find the surface area of each figure. Round your answers to the nearest hundredth, if necessary.

1) 

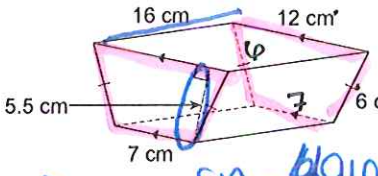
$L = Ph$
$L = 42(4)$
$L = 168 mi^2$
$SA = 168 + 2(10 \cdot 11)$
$168 + 220$
$SA = 388 mi^2$

2) 

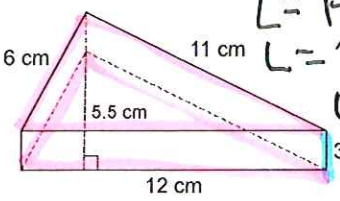
$L = Ph$ $L = 42(9)$
$L = 378 in^2$
$SA = L + 2B$
$378 + 2(112)$ a P
$378 + 2(\frac{1}{2})(6.1)(42)$
$378 + 256.2$
$SA = 634.2 in^2$

3) 

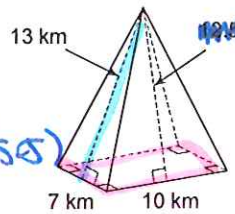
$L = Ph$
$L = 60(9)$
$L = 540 mi^2$
$SA = 540 + 2(\frac{1}{2})8.3(60)$
$540 + 498$
$SA = 1038 mi^2$

4) 

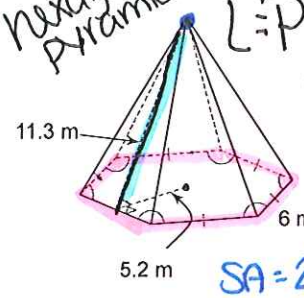
$L = (31)(16)$
$L = 496 cm^2$
$SA = 496 + 2(\frac{1}{2})(b_1 + b_2)h$
$496 + 2(\frac{1}{2})(19)(5.5)$
$496 + 104.5$
$SA = 600.5 cm^2$

5) 

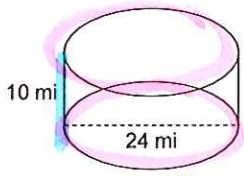
$L = Ph$
$L = 29(3)$
$L = 87 cm^2$
$SA = 87 + 2(\frac{1}{2})(12)(5.5)$
$87 + 66$
$SA = 153 cm^2$

6) 

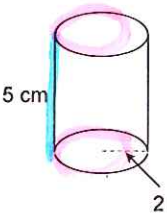
$L = \frac{1}{2} \cdot P \cdot l$
$L = \frac{1}{2}(34)(13)$
$L = 221 km^2$
$SA = L + B$
$SA = 221 + 70$
$SA = 291 km^2$

7) hexagonal pyramid 

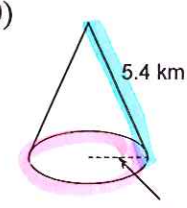
$L = Pl\,\frac{1}{2}$
$L = 36(11.3)\,\frac{1}{2}$
$L = 203.4 m^2$
$SA = L + B$
$SA = 203.4 + \frac{1}{2}(5.2)(36)$
$SA = 203.4 + 93.6$
$SA = 297 m^2$

8) 

$L = 2\pi rh$
$L = 2\pi 12 \cdot 10$
$L = 240\pi\ mi^2$
$r = 12$
$SA = 240\pi + 2\pi 12^2$
$240\pi + 288\pi$
$SA = 528\pi\ mi^2$

9) 

$P = 2\pi rh$
$L = 2\pi 2(5)$
$L = 20\pi cm^2$
$SA = 20\pi + 2\pi 2^2$
$20\pi + 8\pi = 28\pi cm^2$

10) 

$L = \pi rl$
$L = \pi 2(5.4)$
$L = 10.8\pi\ km^2$
$SA = 10.8\pi + \pi r^2$
$10.8\pi + 4\pi$
$SA = 14.8\pi\ km^2$