Surface Area

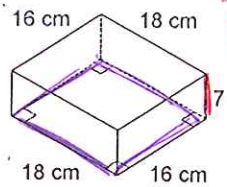
Name Key

Prisms and Cylinders

Date 3/10/10

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

1)



$L = Ph$

$L = 68(7)$

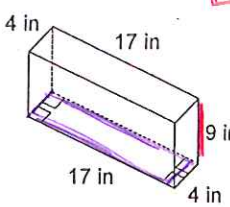
$L = 476 cm^2$

$SA = 476 + 2(18 \cdot 16)$

$476 + 576$

$SA = 1052 cm^2$

2)



$L = (42)(9)$

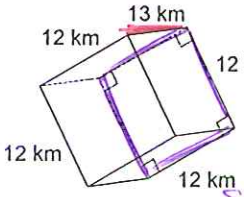
$L = 378 in^2$

$SA = 378 + 2(68)$

$SA = 378 + 136$

$SA = 514 in^2$

3)



$L = 48(13)$

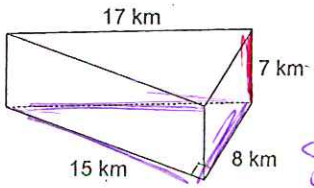
$L = 624 km^2$

$SA = 624 + 2(144)$

$SA = 624 + 288$

$SA = 912 km^2$

4)



$L = 40(7)$

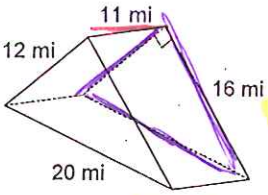
$L = 280$

$SA = 280 + 2(112)$ 15 ft

$SA = 280 + 120$

$SA = 400 km^2$

5)



$L = 48(11)$

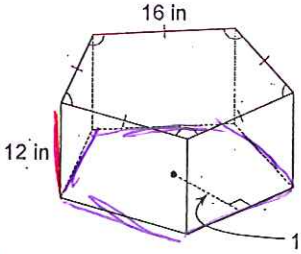
$L = 528 mi^2$

$SA = 528 + 2(112)$ 10 12

$528 + 192$

$SA = 720 mi^2$

6)



$L = 80(12)$

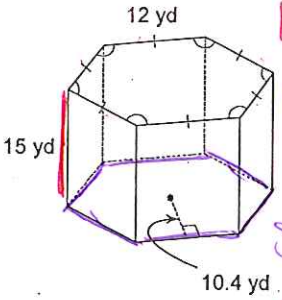
$L = 960 in^2$

$SA = 960 + 2(\frac{1}{2})11(80)$

$SA = 960 + 880$

$SA = 1840 in^2$

7)



$L = 72(15)$

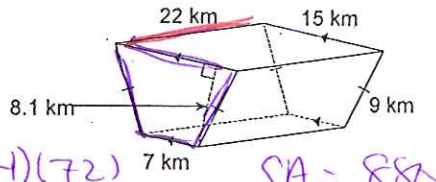
$L = 1080 yd^2$

$SA = 1080 + 2(\frac{1}{2})(10.4)(72)$

$SA = 1080 + 748.8$

$SA = 1828.8 yd^2$

8)



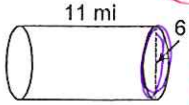
$L = 40(22)$

$L = 880$

$SA = 880 + 2(\frac{1}{2})(178.2)$

$SA = 1058.2 km^2$

9)



$r = 3$

$L = 2\pi rh$

$L = 2\pi\ 3(11)$

$L = 66\pi$

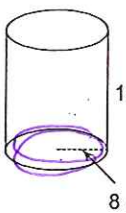
$SA = L + 2\pi r^2$

$66\pi + 2 \cdot \pi\ 9$

$66\pi + 18\pi$

$SA = 84\pi\ mi^2$

10)



$L = 2\pi rh$

$L = 2\pi\ 8\ 19$

$L = 304\pi\ cm^2$

$SA = L + 2\pi r^2$

$304\pi + 2\pi\ 64$

$304\pi + 128\pi$

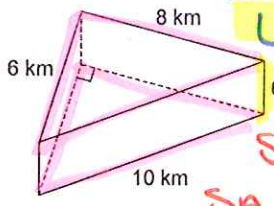
$SA = 432\pi\ cm^2$

Prisms: $L = Ph$ $SA = L + 2B$

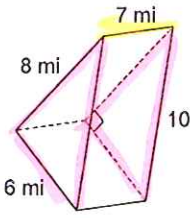
Geometry--Review Name KM ID: 1

Prisms & Cylinders Date 3/17/16 Period

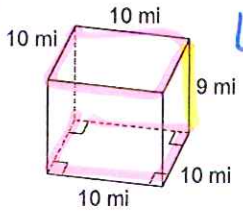
Find the surface area of each figure. Round your answers to the nearest hundredth, if necessary.

1) 

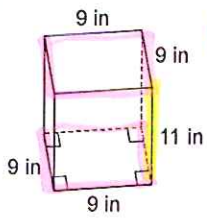
$L = 24(6)$
$L = 144 km^2$
$SA = L + 2B$
$SA = 144 + 2(12)(6)(8)$
$SA = 144 + 48$
$SA = 192 km^2$

2) 

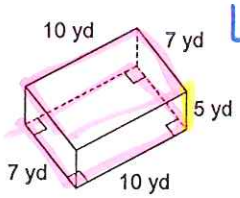
$L = 24(7)$ $L = 168 mi^2$
$SA = L + 2B$
$SA = 168 + 2(12)(6)(8)$
$SA = 168 + 48$
$SA = 216 mi^2$

3) 

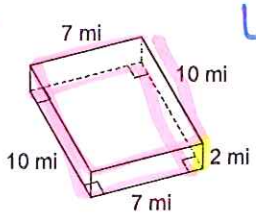
$L = 40(9)$ $L = 360 mi^2$
$SA = 360 + 2(100)$
$360 + 200$
$SA = 560 mi^2$

4) 

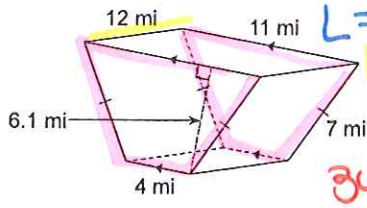
$L = 36(11)$ $L = 396 in^2$
$SA = 396 + 2(81)$
$396 + 162$
$SA = 558 in^2$

5) 

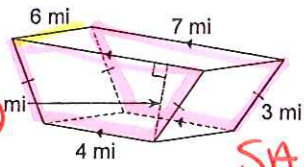
$L = 34(5)$ $L = 170 yd^2$
$SA = 170 + 2(70)$
$= 170 + 140$
$SA = 310 yd^2$

6) 

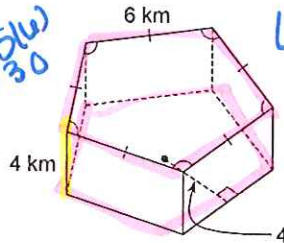
$L = 34(2)$ $L = 68 mi^2$
$SA = 68 + 2(70)$
$68 + 140$
$SA = 208$

7) 

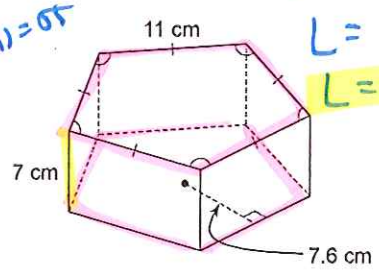
$L = 29(12)$
$L = 348 mi^2$
$SA = 348 + 2(12)(15)(6.1)$
$348 + 2(92)\ 915$
$SA = 439.5$

8) 

$L = 17(6)$
$L = 102 mi^2$
$SA = 102 + 2(12)(11)2.6$
$102 + 28.6$
$SA = 130.6 mi^2$

9) $P = 5(6) = 30$ 

$L = 30(4)$
$L = 120 km^2$
$SA = 120 + 2(12)4.1(30)$
$120 + 123$
$SA = 243 km^2$

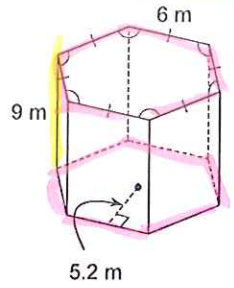
10) $5(11) = 55$ 

$L = 55(7)$
$L = 385 cm^2$
$SA = 385 + 2(12)7.6(55)$
$385 + 418$
$SA = 803 cm^2$

KEY

11) $L = 36(9)$

$L = 324 m^2$



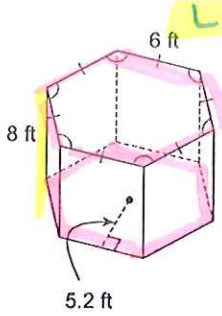
$SA = 324 + 2(1/2)5.2(36)$

$324 + 2(1/2)\ 187.2$

$SA = 511.2\ m^2$

12) $L = 36(8)$

$L = 288\ ft^2$



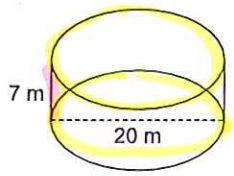
$SA = 288 + 2(1/2)\ 5.2(36)$

$288 + 2(1/2)\ 187.2$

$SA = 475.2\ ft^2$

$L = 2\pi rh$ & $SA = L + 2\pi r^2$

13) $r = 10$



$L = 2\pi(10)(7)$

$L = 2\pi(70)$

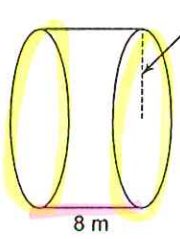
$L = 140\pi\ m^2$

$SA = 140\pi + 2\pi(100)$

$140\pi + 200\pi$

$SA = 340\pi\ m^2$

14)



$L = 2\pi(7)(18)$

$L = 2\pi(36)$

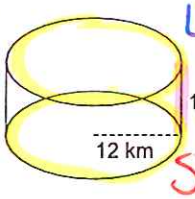
$L = 112\pi\ m^2$

$SA = 112\pi + 2\pi(49)$

$112\pi + 98\pi$

$SA = 210\pi\ m^2$

15)



$L = 2\pi(12)(10)$

$L = 2\pi(120)$

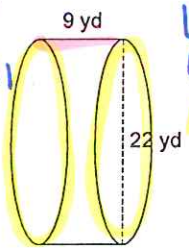
$L = 140\pi\ km^2$

$SA = 140\pi + 2\pi\ 144$

$140\pi + 288\pi$

$SA = 428\pi\ km^2$

16) $r = 11$



$L = 2\pi(11)(9)$

$L = 2\pi(99)$

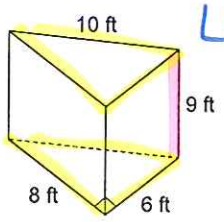
$L = 198\pi$

$SA = 198\pi + 2\pi\ 121$

$198\pi + 242\pi$

$SA = 440\pi\ yd^2$

17)



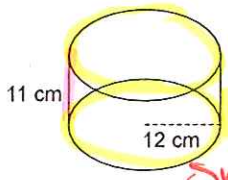
$L = 24(9)$ $L = 216\ ft^2$

$SA = 216 + 2(1/2)\ 8 \cdot 6$

$216 + 48$

$SA = 264\ ft^2$

18)



$L = 2\pi(12)(11)$

$L = 2\pi(132)$

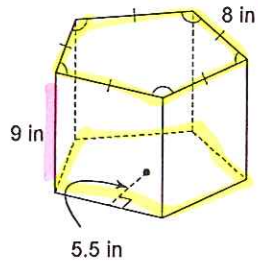
$L = 264\pi\ cm^2$

$SA = 264\pi + 2\pi\ 144$

$264\pi + 288\pi$

$SA = 552\pi\ cm^2$

19)



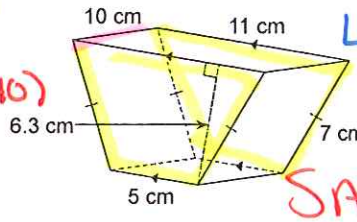
$L = 40(9)$ $L = 360\ in^2$ 20)

$SA = 360 + 2(1/2)(8.5)(40)$

$360 + 2(1/2)\ 220$

$360 + 220$

$SA = 580\ in^2$



$L = 30(10)$

$L = 300\ cm^2$

$SA = 300 + 2(1/2)(5+11)(6.3)$

$300 + 2(1/2)(16)(6.3)$

$300 + 100.8$

$SA = 400.8\ cm^2$