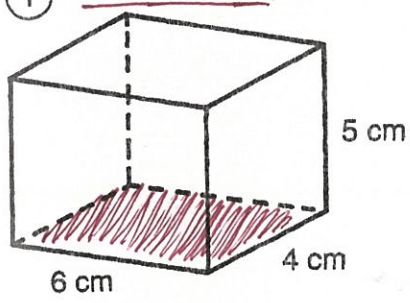
What Is Cold And Comes In Cans?

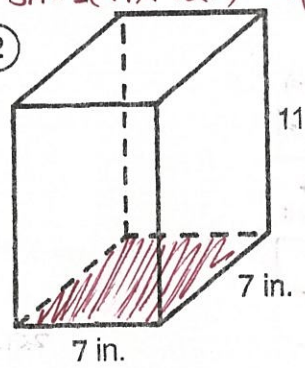
Find the surface area of each figure. Cross out the box containing each correct answer. When you finish, write the letters from the remaining boxes in the spaces at the bottom of the page.

① $SA = 2(24) + 20(5)$

$SA = 148\ cm^2$

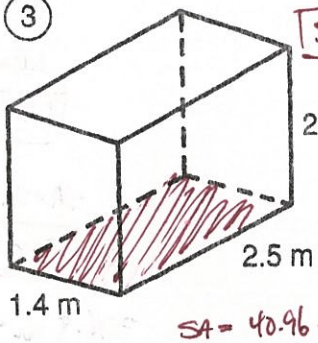


② $SA = 2(49) + 28(11)$ → $SA = 406\ in^2$



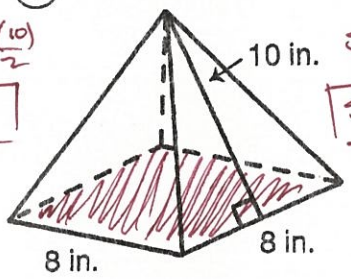
③ $SA = 2(35) + 7.8(2)$

$SA = 22.6\ m^2$



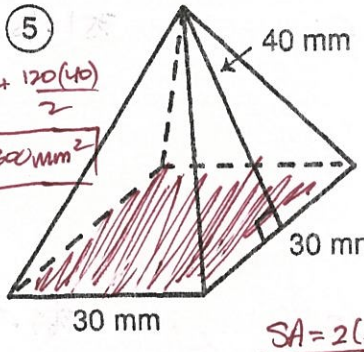
④ $SA = 64 + \frac{32(10)}{2}$

$SA = 224\ in^2$



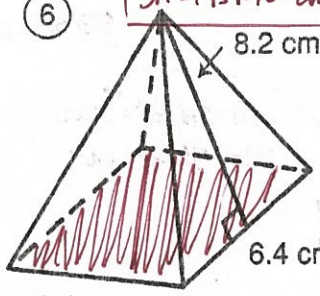
⑤ $SA = 900 + \frac{120(40)}{2}$

$SA = 3300\ mm^2$



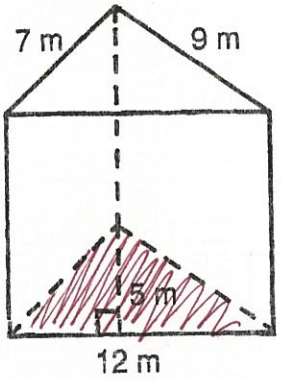
⑥ $SA = 40.96 + \frac{25.6(8.2)}{2}$

$SA = 145.92\ cm^2$



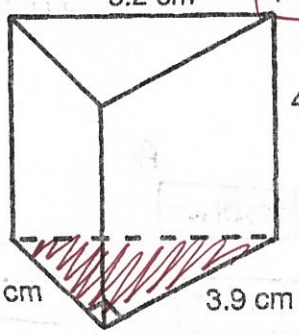
⑦ $SA = 2(30) + (28)(10)$

$SA = 340\ m^2$



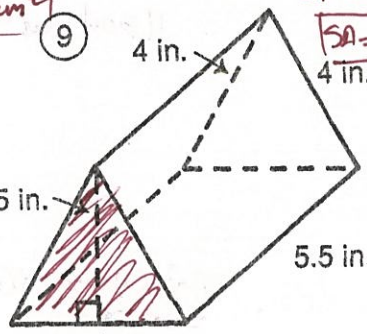
⑧ $SA = 2(50) + 11.7(43)$

$SA = 60.45\ cm^2$



⑨ $SA = 2(7) + \frac{16\sqrt{3}}{4}(5.5)$

$SA = 80\ in^2$



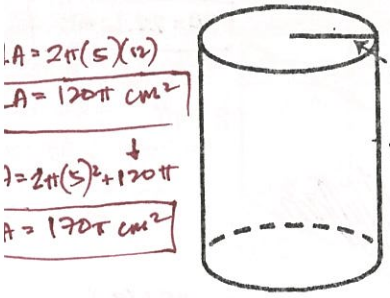
~~MU~~ ~~340 m²~~	~~PI~~ ~~224 in.²~~	CH 3,120 mm²	~~OW~~ ~~148 cm²~~	~~OP~~ 80 in.²	~~FO~~ ~~3,300 mm²~~	IL 118 in.²
IB 81.5 cm²	~~AR~~ ~~22.6 m²~~	~~CL~~ ~~60.45 cm²~~	EA 312 m²	~~CA~~ ~~145.92 cm²~~	NS 25.8 m²	~~KE~~ ~~406 in.²~~

C	H	I	L	I	B	E	A	N	S

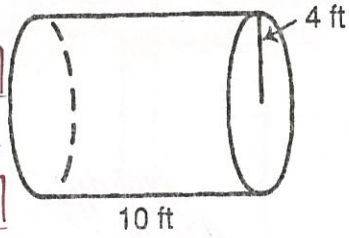
Why Did Humpty Dumpty Have a Great Fall?

Do each exercise and find your answer in the answer column. Write the letter of the answer in each box containing the number of the exercise. Use 3.14 for π.

Find the lateral area and the total surface area of each cylinder.



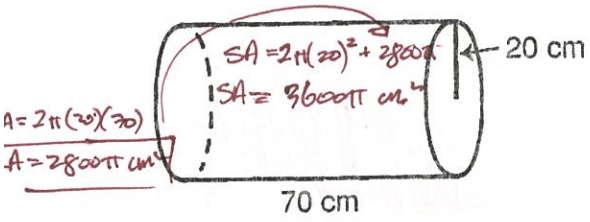
$LA = 2\pi(5)(12)$
$LA = 120\pi \text{ cm}^2$
$SA = 2\pi(5)^2 + 120\pi$
$SA = 170\pi \text{ cm}^2$



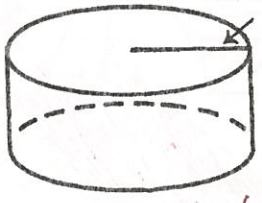
$LA = 2\pi(4)(10)$
$LA = 80\pi \text{ ft}^2$
$SA = 2\pi(4)^2 + 80\pi$
$SA = 112 \text{ ft}^2$

D (1) lateral area: 376.8 cm^2 T (3) lateral area: 251.2 ft^2

V (2) total area: 533.8 cm^2 C (4) total area: 351.68 ft^2



$SA = 2\pi(20)^2 + 2800\pi$
$SA = 3600\pi \text{ cm}^2$
$LA = 2\pi(20)(70)$
$LA = 2800\pi \text{ cm}^2$



F (5) lateral area: 8792 cm^2 S (7) lateral area: 367.38 m^2

K (6) total area: 11,304 cm^2 O (8) total area: 876.06 m^2

II. Find the total surface area of each cylinder.

P (9) $r = 3$ cm, $h = 10$ cm

R (10) $r = 8$ in., $h = 8$ in. 803.84 in^2

A (11) $d = 10.8$ m, $h = 2.6$ m 271.296 m^2

III. Solve.

$SA = 2\pi(3)^2 + 2\pi(3)(10)$
$SA = 78\pi \text{ cm}^2 \approx 244.92 \text{ cm}^2$

B (12) A can of tomato juice is a cylinder with a radius of 7.5 cm and a height of 20 cm. What is the area of the label around the can? 942 cm^2

M (13) A steel oil tank is a cylinder with a diameter of 12 ft and a height of 18 ft. How many square feet of steel were needed to make the tank? 904.32 ft^2

3	8	13	11	6	4	2	9	5	8	10	11	12	11	1	7	2	13	13	4	10
T	O	M	A	K	E	U	P	F	O	R	A	B	A	D	S	U	M	M	E	

(Y) 412.18 ft^2
(R) 803.84 $in.^2$
(H) 792.16 m^2
(T) 251.2 ft2
(M) 904.32 ft^2
(L) 861.6 cm^2
(S) 367.38 m^2
(D) 376.8 cm^2
(P) 244.92 cm^2
(C) 815.18 ft^2
(K) 11,304 cm^2
(B) 942 cm^2
(E) 351.68 ft^2
(N) 775.14 $in.^2$
(U) 533.8 cm^2
(A) 271.296 m^2
(O) 876.06 m^2
(V) 12,412 cm^2
(F) 8,792 cm^2
(I) 311.046 m^2