ANSWER KEY (PRISMS AND CYLINDERS)

Practice (Surface Area)

1) $= 2(8)(3) + (22)(5)$ $= 48 + 110$ $= 158\ ft^2$	2) $= 2\pi(4.7)^2 + 2\pi(4.7)(12)$ $= 44.18\pi + 112\pi$ $= 156.98\pi\ m^2$ or $= 2\pi(4.7)(16.7)$ $= 2\pi(78.49)$ $= 156.98\pi\ m^2$	3) $= (21)(20) + (70)(35)$ $= 420 + 2450$ $= 2870\ mm^2$
4) $= 2\pi(1.5)^2 + 2\pi(1.5)(5)$ $= 4.5\pi + 15\pi$ $= 19.5\pi\ in^2$ $= 61.26 in^2$	5) $= \frac{2\pi(1.5)(11.5)}{2} + 30$ $= 17.25\pi$ $= 54.19 cm^2$	6) $= 12(10) + (36)(33)$ $= 120 + 1188$ $= 1308\ m^2$

Applications

1) $= (30)(40)(25)$ $= 30{,}000\ cm^3$	2) $= 2(64^2) + 4(64)(414)$ $= 8192 + 105894$ $= 114{,}176\ m^2$
3) $= 2\pi(0.92)(0.92 + 2.6)$ $= 1.84\pi\ (3.52)$ $= 6.48\pi\ m^2$	4) $V = 50(25)(1.5)$ or $V = (50)(25)(0.5)$ $V = 1875\ m^2$ $= 625\ m^3$ $V = 50(25)(2)$ $V = 2500\ m^2$ $2500\ m^2 - 1875\ m^2 = 625\ m^2$ more