Surface area practice test

p190 1→5, 8, 9, 11, 12

1. D
2. $49 \times 6 = 294\ cm^2$ B
3. D
4. $2(18 \times 20) + 2(20 \times 5) + 2(18 \times 5) = 720 + 200 + 180 = 1100\ mm^2$ C.
5. $SA = 2\pi(3)^2 + 2\pi(3)(30.5)$
   $= 18\pi + 183\pi$
   201π or $631.14\ cm^2$ C.
8. $SA = 2(13.5 \times 19) + 2(1.4 \times 9) + 2(13.5 \times 14)$
   $513 + 53.2 + 37.8$
   $604\ cm^2$
9. $\frac{1014}{6} = 169\ cm^2$ (area of face) $\sqrt{169} = 13cm$ edge length
11. Ken

$SA = 635.85$

Anika

$SA = 540.47$

↑ greater.

12. Arrangement #1: $2(280) + 2(50) + 2(140) = 940\ cm^2$

    Arrangement #2: $2(280) + 2(100) + 2(70) = 900\ cm^2$

    ↑ uses less plastic wrap.