Answers

**Measurement**

**Unit 1 Line Master 12b**

Answers may vary a little depending on rounding.

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| Area of triangles:  Determine height or notice Pythagorean triple 3, 4, 5.  *h* = 3 cm  2 × (12 × 3) = 36  The area of the triangles  is 36 cm2. | Area of rectangles:  Determine width of one face.  32 + 82 = *c*2  9 + 64 = *c*2  73 = *c*2  *c* =  *c* ≈ 8.54  15 × 12 + 15 × 5 + 15 × 8.54  = 180 + 75 + 128.1  = 383.1  The area of the rectangles  is 383.1 cm2. |

The surface area of the triangular prism is 36 cm2 + 383.1 cm2,   
or 419.1 cm2.