ATTMA Level 1 Pre-Qualification Sample Questions:

The ATTMA Level 1 course is appropriate for candidates who possess a base level of familiarity with mathematics, geometry, and construction terminology. This sample test is useful to gauge whether you are comfortable with knowledge and skills before the course, but is no guarantee that you will pass the ATTMA Level 1 accreditation exam.

Answers to the questions are provided at the end of the page. If you find that you have difficulty with a significant number of these questions, you may find the course challenging and should review material before attending.

1. Which of the following is ***not*** correct regarding a blower door:
    a. A blower door measures the air leakage of a house
    b. A blower door can be used to help locate leaks in the envelope
    c. A blower door can be used to identify possible improvements to air tightness
    d. A blower door measures the effectiveness of insulation coverage

2. A blower door measures a series of which two factors to arrive at an estimate of envelope leakage:
    a. Air leakage and wind speed
    b. Building height and air pressure
    c. Air leakage and surface temperature
    d. Building pressure and air leakage

3. Which of the following is a unit of area measurement?
    a. Cubic metres (m^3)
    b. Square metres (m^2)
    c. Kilometres (km)
    d. Metres per second (m/s)

4. Four houses have been tested for air tightness and the following results have been obtained: 3, 5, 7, and 10 $m^3 \cdot hr^{-1} \cdot m^{-2}$ at 50 Pa. Which house is the most airtight?
    a. 3 $m^3 \cdot hr^{-1} \cdot m^{-2}$
    b. 5 $m^3 \cdot hr^{-1} \cdot m^{-2}$
    c. 7 $m^3 \cdot hr^{-1} \cdot m^{-2}$
    d. 10 $m^3 \cdot hr^{-1} \cdot m^{-2}$

5. 63.9 m x 2.73 m =
    a. 174.4
    b. 174.4 m
    c. 174.4 m^2
    d. 174.4 m^3

6. 8,342 $m^3 \cdot hr^{-1}$ / 1000 m^2 =
    a. 8,342 $m^3 \cdot hr^{-1} \cdot m^{-2}$
    b. 8.342 m^2
    c. 8.342 $m^3 \cdot hr^{-1} \cdot m^{-2}$
    d. 8.342 h^{-1}

7. 4,314 $m^3 \cdot hr^{-1} \cdot m^{-2}$ x 100 m^2 / 100 m^3 =
    a. 4,314 m^2
    b. 4,314 hr^{-1}
    c. 4,314 $m^3 \cdot hr^{-1} \cdot m^{-2}$
    d. 4,314 m^3

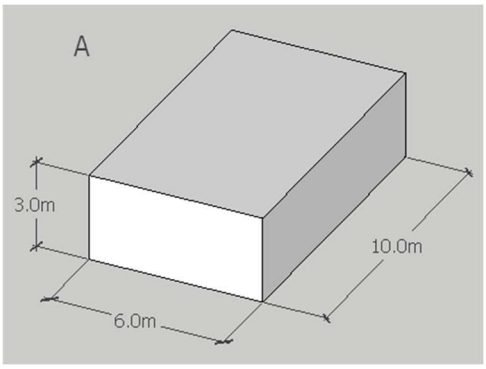
8. 121.6 m^2 x 2 + 115.4 m^2 =
    a. 474 m
    b. 358.6 m^2
    c. 358.6 m^3
    d. 14,276 m^2

9. If a fan pulls 2,348 $m^3 \cdot hr^{-1}$ @ 50 Pa, how many m^3 has it moved in 2 hours @ 50 Pa?
    a. 4,696 m^3
    b. 4,696 $m^3 \cdot hr^{-1}$
    c. 2,348 m^3
    d. 1,174 $m^3 \cdot hr^{-1}$

Envelope area calculations

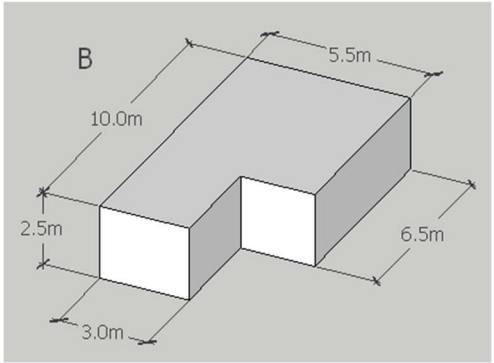
10. What is the surface area of the shape **A** below? It is a solid (i.e. it has six sides).

11. What is the volume of the shape **A**?



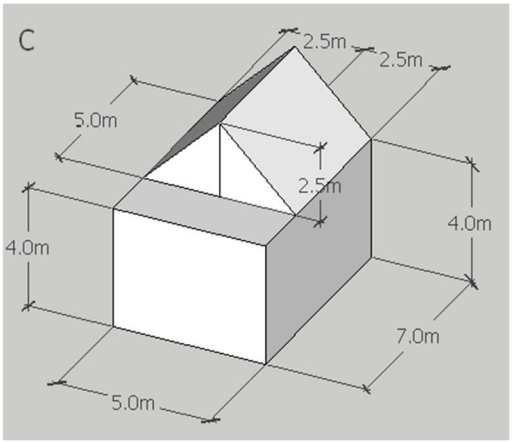
12. What is the surface area of the shape **B** below? It is a solid.

13. What is the volume of the shape **B**?

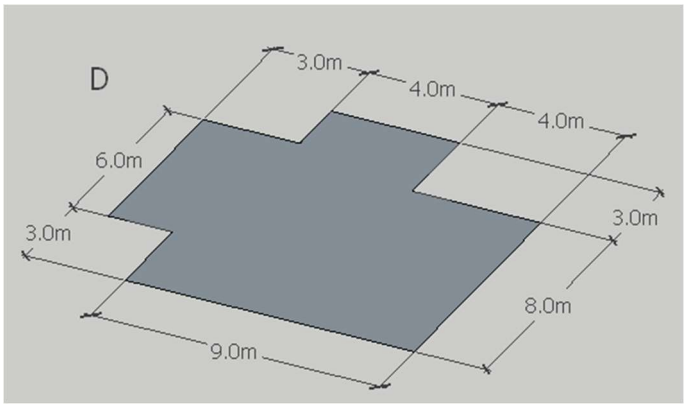


14. What is the surface area of the shape **C** below? It is a solid.

15. What is the volume of the shape **C**?



16. What is the surface area of the shape **D** below?



Answers:

1. D
2. D
3. B
4. A
5. C
6. C
7. B
8. B
9. A
10. 216 m^2
11. 180 m^3
12. 170 m^2
13. 115.6 m^3
14. 188.9 m^2
15. 171.2 m^3
16. 97 m^2