Appendix A: Math Pre-Test[[1]](#footnote-1)

KEY

You may use a calculator to answer the following questions. Answers may be expressed in decimal or fraction form. (15-minute time limit)

You must score 73% or higher, answering at least 11 out of 15 correctly. Failure to do so will require additional training in basic math skills.

1. 8 1/2” 2. 23 1/4” 3. 23.25

 17 3/4” - 7 1/8” - 12.75

 + 23 3/8” 16 1/8 10.5

 49 5/8

 or 4’1 5/8”

4. 350/40 = \_\_8.75\_\_ 5. 3/8 x 120 = \_\_45\_\_\_\_\_\_

1. 6. How many inches are in 5 feet? \_60\_\_\_\_\_\_\_

7. One square foot equals how many square inches? \_144\_\_\_\_\_\_\_

1. 8. What is the perimeter of the house diagramed below? \_\_\_148\_\_\_\_\_feet.

9. What is the area of the house diagramed below? \_1,032\_\_\_\_\_\_\_square feet.

1. 10. What is the volume of the house diagramed below? \_8,256\_\_\_\_\_\_\_cubic feet.
2. What is 75% of 2400? \_1,800\_\_\_\_\_\_\_.

 42’

 20’ (one story with 8’ ceiling height)

 32’

 26’

 12’

 16’

 Write in the measurement indicated by the arrow pointing at the tape measure.

 12.\_\_5/8 \_\_\_\_ 13.\_2 3/8\_\_\_\_\_ 14.\_3 3/8\_\_\_\_\_ 15.\_5 3/16\_\_\_\_



1. Adapted from the U.S. Department of Energy, “National Weatherization Training & Technical Assistance Plan,” December 2009, <http://www1.eere.energy.gov/wip/pdfs/wap_tta_plan.pdf>. [↑](#footnote-ref-1)