

# 8<sup>th</sup> Grade Geometry Readiness: Winter Screener

Questions 1-3: Select the correct answer for each question.

1. Figure B is a scaled drawing of figure A with a scale factor of 4. Find the width for figure B.

Figure A

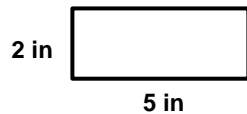


Figure B



- 10 in     
  9 in     
  8 in     
  20 in

2. Figure D is a scaled drawing of figure C. Find the missing length in figure D.

Figure C

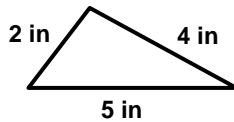
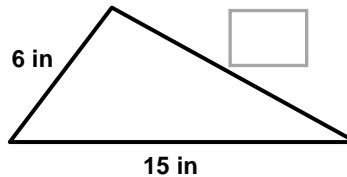


Figure D



- 3 in     
  8 in     
  1.33 in     
  12 in

3. Figure F is a scaled drawing of figure E with a scale factor of 4. If the area of Figure E is  $8 \text{ ft}^2$ , then what is the area of figure F?

Figure E



Area =  $8 \text{ ft}^2$

Figure F



Area =

- $24 \text{ ft}^2$      
   $14 \text{ ft}^2$      
   $128 \text{ ft}^2$      
   $32 \text{ ft}^2$



Please stop, put your pencil down and wait for the next directions.



# 8<sup>th</sup> Grade Geometry Readiness: Winter

(continued)

Questions 4-6: Select the correct answer for each question.

4. Which set of dimensions can be 3 sides of a triangle?

4 in, 6 in, and 10 in

4 in, 6 in, and 9 in

4 in, 5 in, and 9 in

4 in, 7 in, and 12 in

5. Two dimensions of a triangle are 3 in and 8 in. Select the length that is possible for the third side of the triangle?

4 in

10 in

5 in

11 in

6. Two angle measures of a triangle are 45 and 80 degrees. Select the measurement that is possible for the third angle of the triangle?

35 degrees

45 degrees

55 degrees

100 degrees

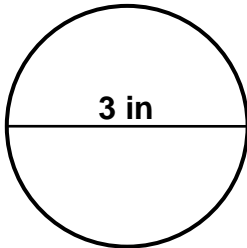


Please stop, put your pencil down and wait for the next directions.

**Questions 7-9:** Select the correct number and label for each question.

**7.** Find the circumference of the circle. (Use 3.14 for  $\pi$ .)

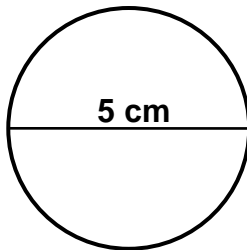
(Note: The figure is not drawn to scale.)



- 7.07       18.84       9.42       28.26  
 in       in<sup>2</sup>       in<sup>3</sup>

**8.** Find the area of the circle. (Use 3.14 for  $\pi$ .)

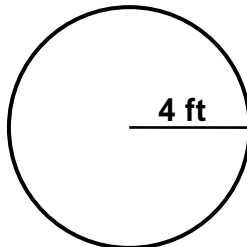
(Note: The figure is not drawn to scale.)



- 15.7       19.63       15.2       31.4  
 cm<sup>2</sup>       cm       cm<sup>3</sup>

**9.** Find the area of the circle. (Use 3.14 for  $\pi$ .)

(Note: The figure is not drawn to scale.)



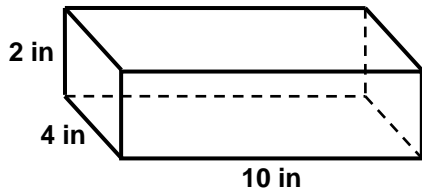
- 200.96       25.12       100.48       50.24  
 ft<sup>3</sup>       ft<sup>2</sup>       ft



Please stop, put your pencil down and wait for the next directions.

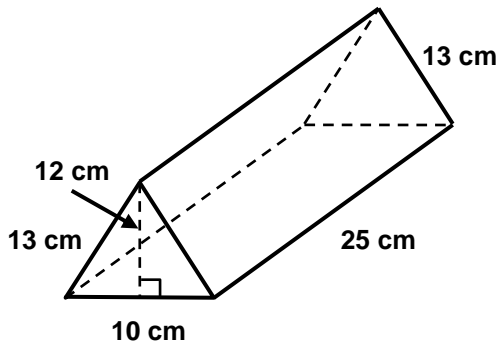
Questions 10-12: Select the correct number and label for each question.

**10.** Find the surface area of the right prism. (Note: The figure is not drawn to scale.)



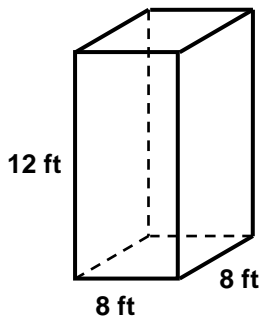
- 120       80       128       136  
 in       in<sup>2</sup>       in<sup>3</sup>

**11.** Find the surface area of the right prism. (Note: The figure is not drawn to scale.)



- 900       1,020       1,500       960  
 cm<sup>2</sup>       cm       cm<sup>3</sup>

**12.** Find the surface area of the right prism. (Note: The figure is not drawn to scale.)



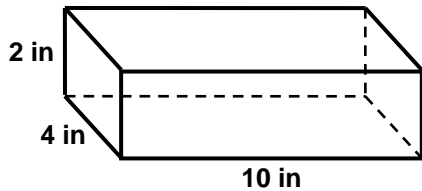
- 768       448       512       384  
 ft<sup>3</sup>       ft<sup>2</sup>       ft



Please stop, put your pencil down and wait for the next directions.

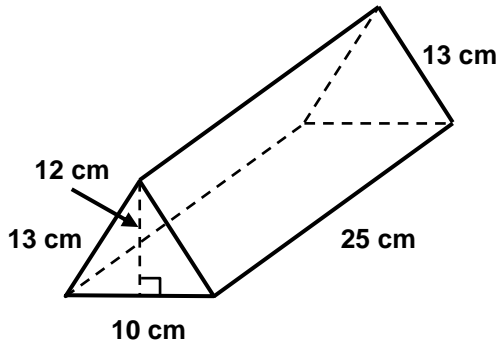
Questions 13-15: Select the correct number and label for each question.

**13.** Find the volume of the right prism. *(Note: The figure is not drawn to scale.)*



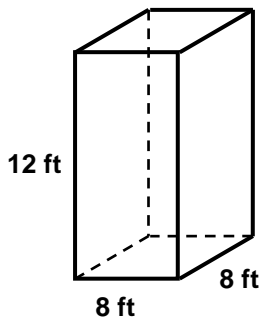
- 120       80       128       136  
 in       in<sup>2</sup>       in<sup>3</sup>

**14.** Find the volume of the right prism. *(Note: The figure is not drawn to scale.)*



- 900       1,020       1,500       960  
 cm<sup>2</sup>       cm       cm<sup>3</sup>

**15.** Find the volume of the right prism. *(Note: The figure is not drawn to scale.)*



- 768       448       512       384  
 ft<sup>3</sup>       ft<sup>2</sup>       ft



Please stop, put your pencil down and wait for the next directions.