

# 8<sup>th</sup> Grade Geometry Readiness: Spring 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 5. Find the length for figure B.

Figure A

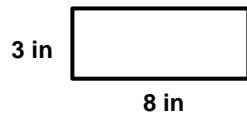
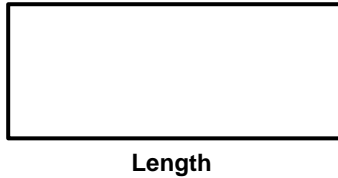


Figure B



- 24in     
  40 in     
  13 in     
  15 in

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

Figure C

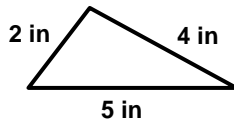
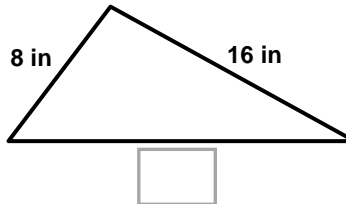


Figure D



- 20 in     
  4 in     
  1.25 in     
  10 in

3. Figure F is a scaled drawing of figure E with a scale factor of 3. If the area of Figure E is  $10 \text{ ft}^2$ , then what is the area of figure F?

Figure E



Area =  $10 \text{ ft}^2$

Figure F



Area =

- $13 \text{ ft}^2$      
   $30 \text{ ft}^2$      
   $19 \text{ ft}^2$      
   $90 \text{ ft}^2$



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



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

(continued)

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

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

- 5 in, 8 in, and 13 in
- 5 in, 7 in, and 13 in
- 5 in, 7 in, and 12 in
- 5 in, 8 in, and 12 in

**5.** Two dimensions of a triangle are 5 in and 11 in. Select the length that is possible for the third side of the triangle?

- 5 in
- 6 in
- 15 in
- 16 in

**6.** Two angle measures of a triangle are 35 and 60 degrees. Select the measurement that is possible for the third angle of the triangle?

- 5 degrees
- 85 degrees
- 75 degrees
- 95 degrees

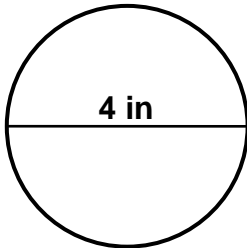


Please stop, put your pencil down and wait for the next directions.

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

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

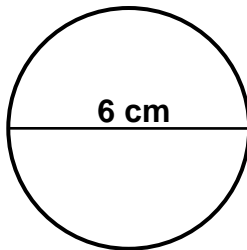
(Note: The figure is not drawn to scale.)



- |                             |                                       |                                       |                              |
|-----------------------------|---------------------------------------|---------------------------------------|------------------------------|
| <input type="radio"/> 25.13 | <input type="radio"/> 12.57           | <input type="radio"/> 50.27           | <input type="radio"/> 100.54 |
| <input type="radio"/> in    | <input type="radio"/> in <sup>2</sup> | <input type="radio"/> in <sup>3</sup> |                              |

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

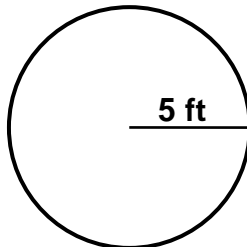
(Note: The figure is not drawn to scale.)



- |                                       |                             |                                       |                             |
|---------------------------------------|-----------------------------|---------------------------------------|-----------------------------|
| <input type="radio"/> 113.04          | <input type="radio"/> 18.85 | <input type="radio"/> 37.7            | <input type="radio"/> 28.26 |
| <input type="radio"/> cm <sup>2</sup> | <input type="radio"/> cm    | <input type="radio"/> cm <sup>3</sup> |                             |

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

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



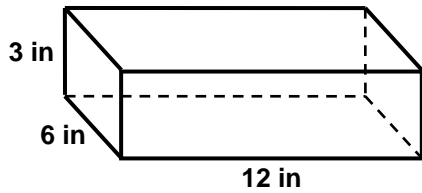
- |                                       |                                       |                           |                            |
|---------------------------------------|---------------------------------------|---------------------------|----------------------------|
| <input type="radio"/> 62.8            | <input type="radio"/> 31.4            | <input type="radio"/> 314 | <input type="radio"/> 78.5 |
| <input type="radio"/> ft <sup>3</sup> | <input type="radio"/> ft <sup>2</sup> | <input type="radio"/> ft  |                            |



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

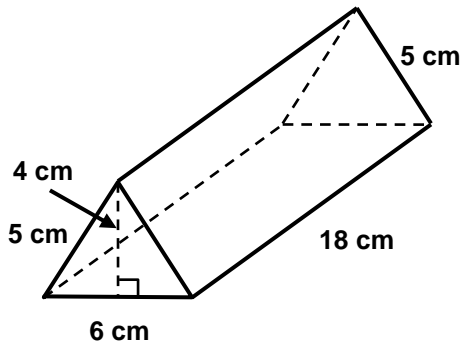
Questions 10-12: Select the correct number and label for each question.

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



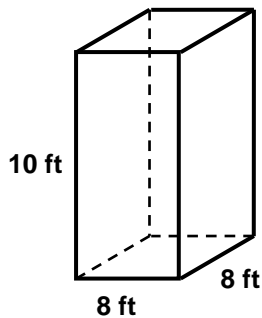
- |                           |                                       |                                       |                           |
|---------------------------|---------------------------------------|---------------------------------------|---------------------------|
| <input type="radio"/> 234 | <input type="radio"/> 108             | <input type="radio"/> 252             | <input type="radio"/> 216 |
| <input type="radio"/> in  | <input type="radio"/> in <sup>2</sup> | <input type="radio"/> in <sup>3</sup> |                           |

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



- |                                       |                           |                                       |                           |
|---------------------------------------|---------------------------|---------------------------------------|---------------------------|
| <input type="radio"/> 312             | <input type="radio"/> 216 | <input type="radio"/> 288             | <input type="radio"/> 300 |
| <input type="radio"/> cm <sup>2</sup> | <input type="radio"/> cm  | <input type="radio"/> cm <sup>3</sup> |                           |

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



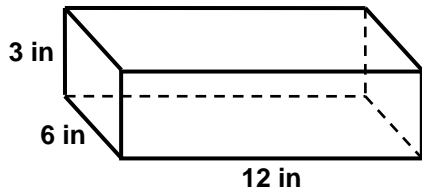
- |                                       |                                       |                           |                           |
|---------------------------------------|---------------------------------------|---------------------------|---------------------------|
| <input type="radio"/> 320             | <input type="radio"/> 384             | <input type="radio"/> 640 | <input type="radio"/> 448 |
| <input type="radio"/> ft <sup>3</sup> | <input type="radio"/> ft <sup>2</sup> | <input type="radio"/> ft  |                           |



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

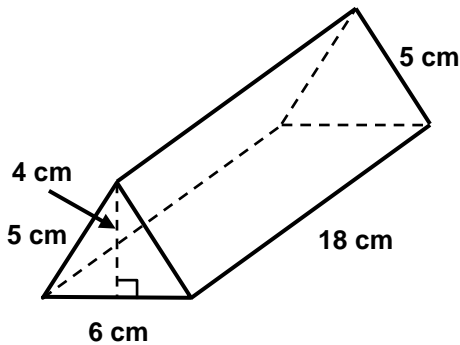
**Questions 13-15:** Select the correct number and label for each question.

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



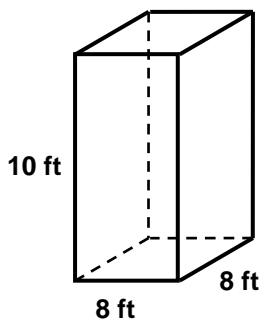
- |                           |                                       |                                       |                           |
|---------------------------|---------------------------------------|---------------------------------------|---------------------------|
| <input type="radio"/> 234 | <input type="radio"/> 108             | <input type="radio"/> 252             | <input type="radio"/> 216 |
| <input type="radio"/> in  | <input type="radio"/> in <sup>2</sup> | <input type="radio"/> in <sup>3</sup> |                           |

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



- |                                       |                           |                                       |                           |
|---------------------------------------|---------------------------|---------------------------------------|---------------------------|
| <input type="radio"/> 312             | <input type="radio"/> 216 | <input type="radio"/> 288             | <input type="radio"/> 300 |
| <input type="radio"/> cm <sup>2</sup> | <input type="radio"/> cm  | <input type="radio"/> cm <sup>3</sup> |                           |

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



- |                                       |                                       |                           |                           |
|---------------------------------------|---------------------------------------|---------------------------|---------------------------|
| <input type="radio"/> 320             | <input type="radio"/> 384             | <input type="radio"/> 640 | <input type="radio"/> 448 |
| <input type="radio"/> ft <sup>3</sup> | <input type="radio"/> ft <sup>2</sup> | <input type="radio"/> ft  |                           |



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