8th 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.
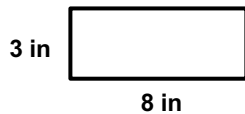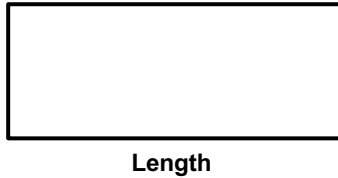
Figure A

Figure B

3 in

8 in

Length

○   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

2 in   4 in

5 in

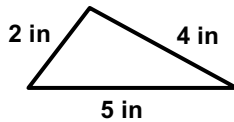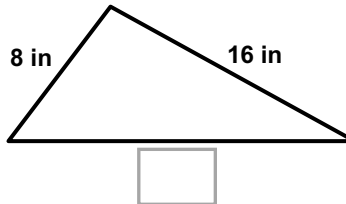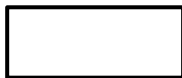8 in   16 in

○   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 ft^2, then what is the area of figure F?

Figure F

Figure E

Area = 10 ft^2

Area =

○   13 ft^2 ○   30 ft^2 ○   19ft^2 ○   90 ft^2

STOP

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

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**
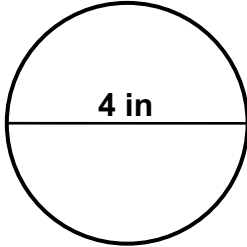
   ○ 75 degrees   ○ 95 degrees

STOP

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

        Number Correct = _____

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

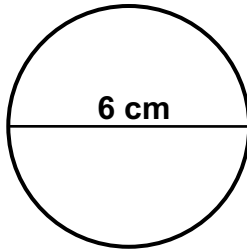**7.** Find the circumference of the circle. *(Use 3.14 for π.)*
(Note: The figure is not drawn to scale.)

4 in

○ 25.13 | ☑ 12.57 | ○ 50.27 | ○ 100.54

☑ in | ○ in² | ○ in³

8. Find the area of the circle. *(Use 3.14 for π.)*
(Note: The figure is not drawn to scale.)

6 cm

○ 113.04 | ○ 18.85 | ○ 37.7 | ☑ 28.26

☑ cm² | ○ cm | ○ cm³

9. Find the area of the circle. *(Use 3.14 for π.)*
(Note: The figure is not drawn to scale.)

5 ft
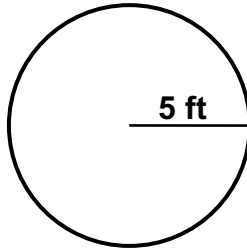
○ 62.8 | ○ 31.4 | ○ 314 | ☑ 78.5

○ ft³ | ☑ ft² | ○ ft

STOP

Please stop, put your pencil down and wait for the next directions.
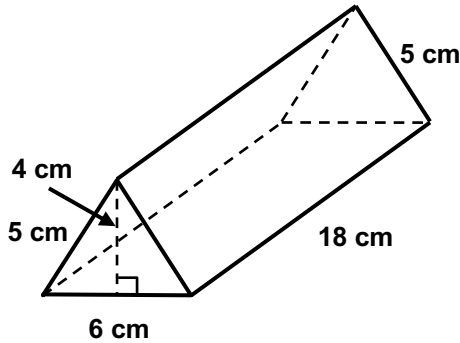
Number Correct = _____

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

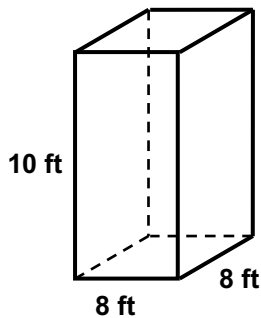**10.** Find the surface area of the right prism. *(Note: The figure is not drawn to scale.)*

3 in
6 in
12 in
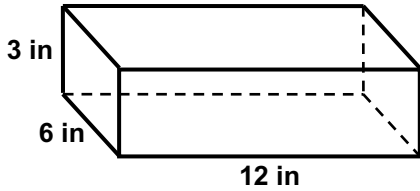
- ○ 234
- ○ 108
- ○ **252**
- ○ 216

- ○ in
- ○ **in²**
- ○ in³

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

5 cm
4 cm
5 cm
18 cm
6 cm

- ○ **312**
- ○ 216
- ○ 288
- ○ 300

- ○ **cm²**
- ○ cm
- ○ cm³

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

10 ft
8 ft
8 ft

- ○ 320
- ○ 384
- ○ 640
- ○ **448**

- ○ ft³
- ○ **ft²**
- ○ ft

STOP

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

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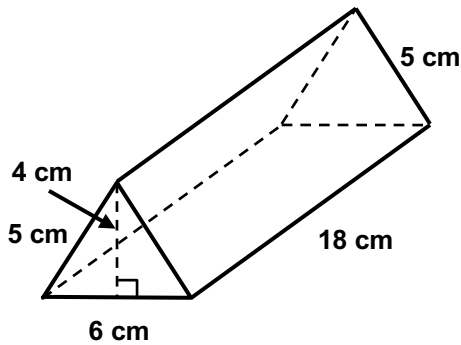
Number Correct = _____

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

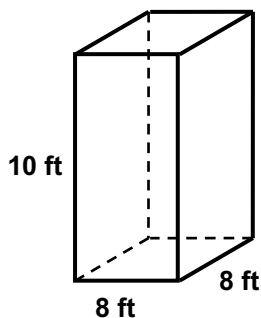**13.** Find the volume of the right prism. *(Note: The figure is not drawn to scale.)*

3 in
6 in
12 in
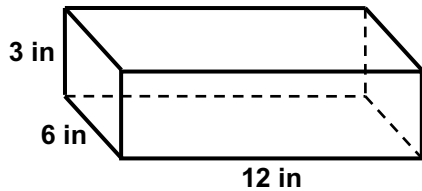
○ 234   ○ 108   ○ 252   ○ **216**

○ in   ○ in²   ○ **in³**

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

5 cm
4 cm
5 cm
18 cm
6 cm

○ 312   ○ **216**   ○ 288   ○ 300

○ cm²   ○ cm   ○ **cm³**

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

10 ft
8 ft
8 ft

○ 320   ○ 384   ○ **640**   ○ 448

○ **ft³**   ○ ft²   ○ ft

STOP

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