Name _____ Date _____

8ᵗʰ Grade Geometry Readiness: Fall 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 length for figure B.
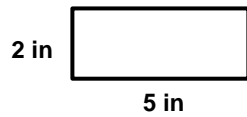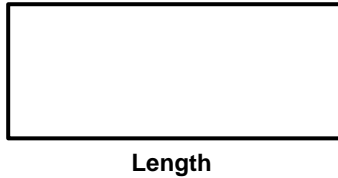
Figure A

Figure B

2 in

5 in

Length

- ○ 8 in
- ○ 9 in
- ○ 10 in
- ○ 20 in

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

Figure C

2 in   4 in

5 in

Figure D

6 in   12 in

? in

- ○ 5 in
- ○ 10 in
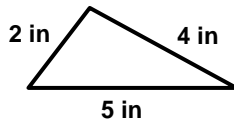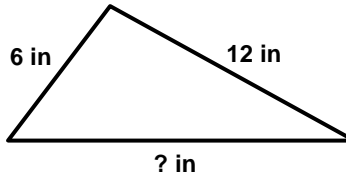- ○ 15 in
- ○ 2.5 in

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

Figure F

Figure E

3 ft

1 ft

Area = 4 ft^2

Area = ? ft^2

- ○ 9 ft^2
- ○ 36 ft^2
- ○ 3 ft^2
- ○ 12 ft^2

STOP

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

Number Correct = _____

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

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

- ○   3 in, 6 in, and 10 in
- ○   3 in, 6 in, and 9 in
- ○   3 in, 7 in, and 9 in
- ○   3 in, 7 in, and 10 in

---

5. Two dimensions of a triangle are 4 in and 10 in. Select the length that is possible for the third side of the triangle?

- ○   5 in
- ○   14 in
- ○   6 in
- ○   12 in

---

6. Two angle measures of a triangle are 25 and 50 degrees. Select the measurement that is possible for the third angle of the triangle?

- ○   15 degrees
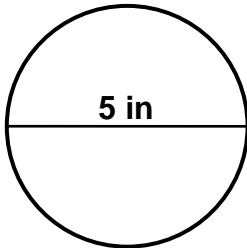- ○   75 degrees
- ○   95 degrees
- ○   105 degrees

(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.

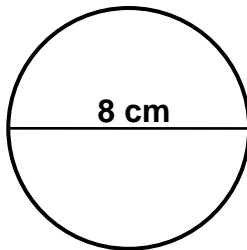**7.** Find the circumference of the circle. *(Use 3.14 for π.)*
(Note: The figure is not drawn to scale.)

5 in

○ 78.5   ○ 19.625   ○ 15.7   ○ 31.4

○ in   ○ in²   ○ in³

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

8 cm

○ 50.24   ○ 200.96   ○ 25.12   ○ 100.48

○ cm²   ○ cm   ○ cm³

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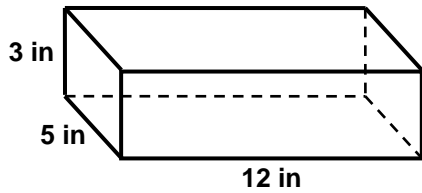*(Note: The figure is not drawn to scale.)*

6 ft
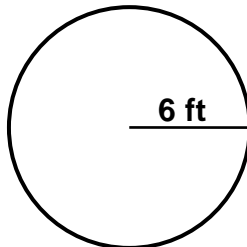
○ 28.26   ○ 452.16   ○ 37.68   ○ 113.04

○ ft³   ○ ft²   ○ ft

STOP

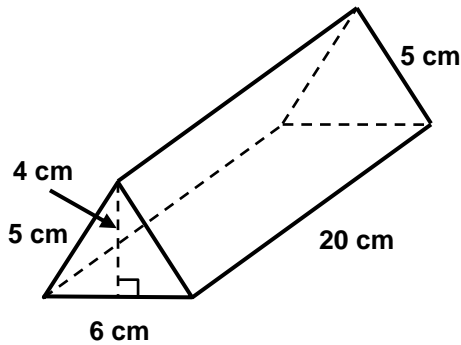Please stop, put your pencil down and wait for the next directions.

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

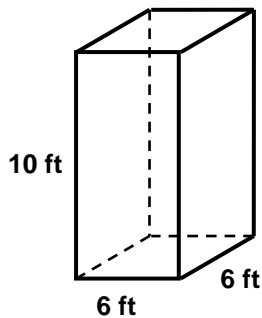**10.** Find the surface area of the right prism. *(Note: The figure is not drawn to scale.)*

3 in
5 in
12 in

○ 222   ○ 180   ○ 207   ○ 192

○ 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
20 cm
6 cm

○ 332   ○ 240   ○ 320   ○ 344

○ cm²   ○ cm   ○ cm³

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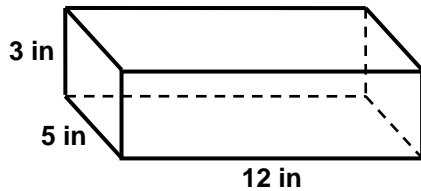

10 ft
6 ft
6 ft

○ 240   ○ 312   ○ 276   ○ 360

○ ft³   ○ ft²   ○ ft

STOP

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

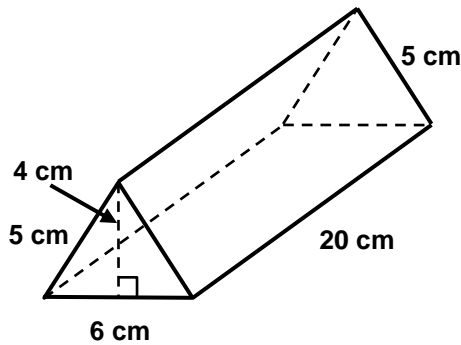© OAISD, August 2023   **Number Correct = _____**

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

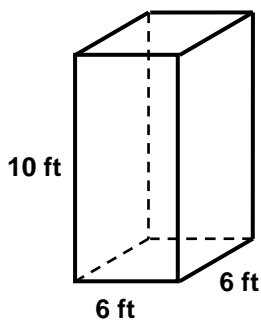**13.** Find the volume of the right prism. *(Note: The figure is not drawn to scale.)*

3 in
5 in
12 in

○ 222   ○ 180   ○ 207   ○ 192

○ 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
20 cm
6 cm

○ 332   ○ 240   ○ 320   ○ 344

○ cm²   ○ cm   ○ cm³

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

10 ft
6 ft
6 ft

○ 240   ○ 312   ○ 276   ○ 360

○ ft³   ○ ft²   ○ ft

STOP

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