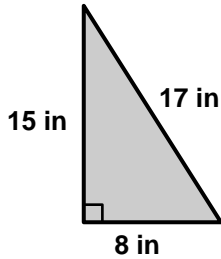# 7th Grade Geometry Readiness: Fall Screener
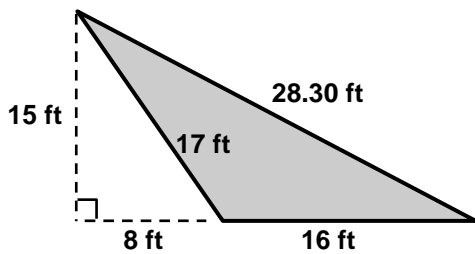
Questions 1-3: Select the correct number and label for each question.

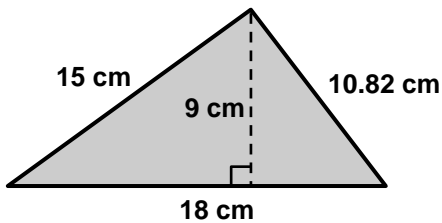**1.** Find the area of the triangle. *(Note: The figure is not drawn to scale.)*

17 in
15 in
8 in

○ 68   ○ 60   ○ 120   ○ 40

○ in   ○ in³   ○ in²

2. Find the area of the shaded triangle. *(Note: The figure is not drawn to scale.)*

15 ft
28.30 ft
17 ft
8 ft   16 ft

○ 120   ○ 180   ○ 61.30   ○ 63.75

○ ft³   ○ ft²   ○ ft

3. Find the area of the shaded triangle. *(Note: The figure is not drawn to scale.)*

15 cm   10.82 cm
9 cm
18 cm

○ 162   ○ 43.82   ○ 54   ○ 81
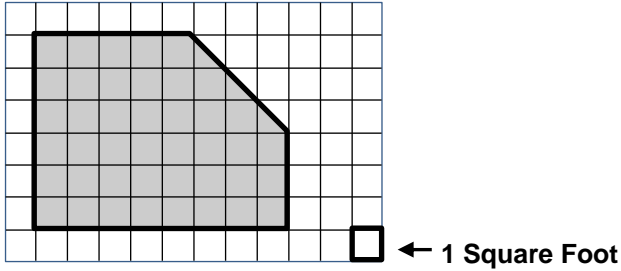
○ cm²   ○ cm   ○ cm³

STOP

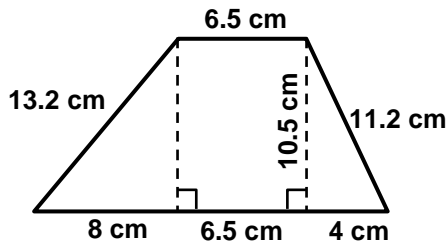Please stop, put your pencil down and wait for the next directions.

Questions 4-6: Select the correct number and label for each question.

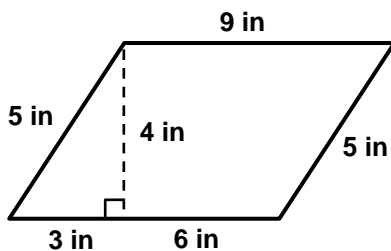**4.** Find the area of the shaded polygon. *(Note: The figure is not drawn to scale.)*

← **1 Square Foot**

- ⬭ **43.5**
- ⬭ 48
- ⬭ 44.5
- ⬭ 45

- ⬭ ft³
- ⬭ **ft²**
- ⬭ ft

5. Find the area of the trapezoid. *(Note: The figure is not drawn to scale.)*

6.5 cm
13.2 cm
10.5 cm
11.2 cm
8 cm 6.5 cm 4 cm

- ⬭ 49.4
- ⬭ **131.25**
- ⬭ 140
- ⬭ 165

- ⬭ **cm²**
- ⬭ cm
- ⬭ cm³

6. Find the area of the parallelogram. *(Note: The figure is not drawn to scale.)*

9 in
5 in
4 in
5 in
3 in 6 in

- ⬭ 45
- ⬭ 18
- ⬭ 28
- ⬭ **36**

- ⬭ in
- ⬭ **in²**
- ⬭ in³

STOP

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

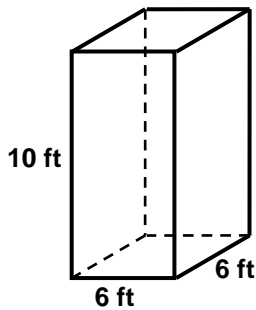© OAISD, August 2023   **Number Correct = _____**

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

7. What is the maximum number of 1-inch cubes ▢ that can fit inside the right prism?
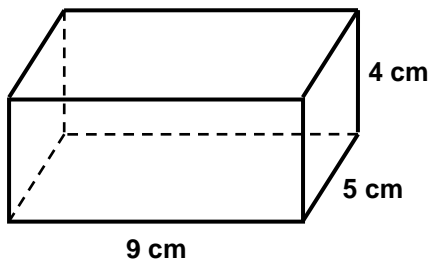*(Note: The figure is not drawn to scale.)*

3 in
5 in
12 in
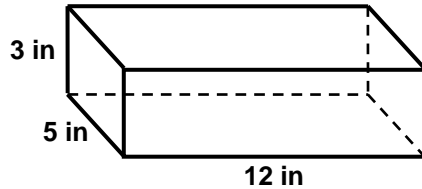
○ **180 cubes**   ○ 192 cubes   ○ 102 cubes   ○ 222 cubes

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

10 ft
6 ft
6 ft

○ 240   ○ **360**   ○ 312   ○ 22

○ ft³   ○ **ft²**   ○ ft

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

4 cm
5 cm
9 cm

○ 18   ○ 122   ○ 202   ○ **180**
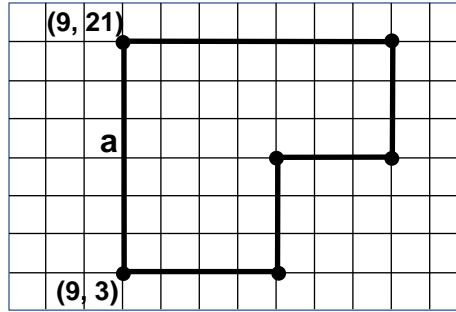
○ **cm²**   ○ cm   ○ cm³

STOP

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

Questions 10-12: Select the correct answer for each question.
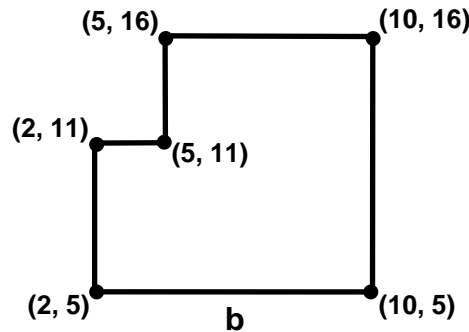
10. Find the length of side a.

(9, 21)

a

(9, 3)

○ 6   ○ 18   ○ 21   ○ 24

11. Find the length of side b.
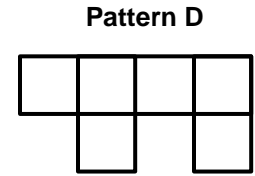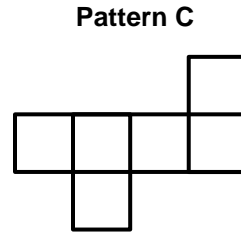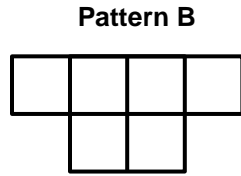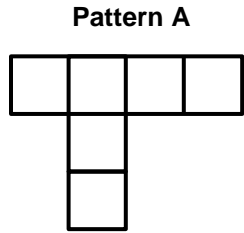
(5, 16)   (10, 16)

(2, 11)   (5, 11)

(2, 5)   (10, 5)

b

○ 8   ○ 12   ○ 10   ○ 5

12. Find the length of side c.

(6, 20)   b   (18, 20)

c   d   (26, 16)

(18, 16)

a

e

(6, 2)   f   (26, 2)
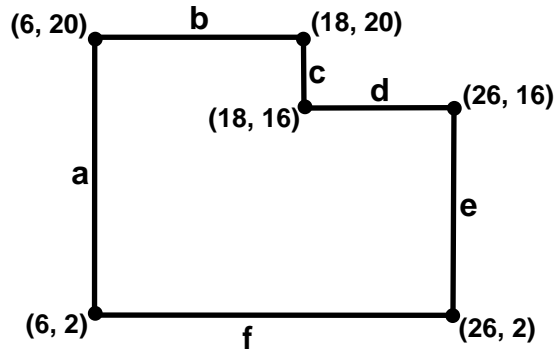
○ 12   ○ 4   ○ 2   ○ 8

STOP

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

Questions 13-15: Select the correct answer for each question.

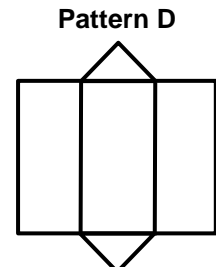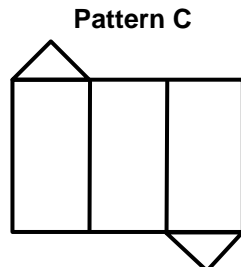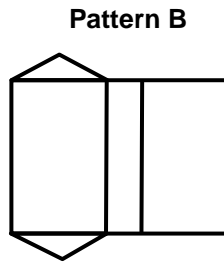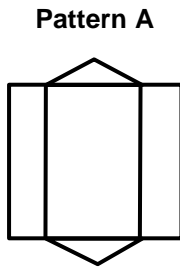**13.** Which pattern could be folded into a cube?

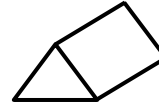| **Pattern A**	**Pattern B**	**Pattern C**	**Pattern D**

○ A   ○ B   ○ **C**   ○ D

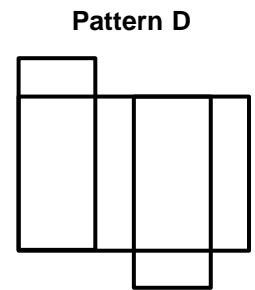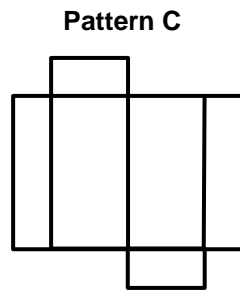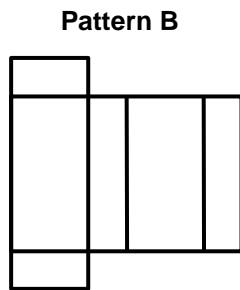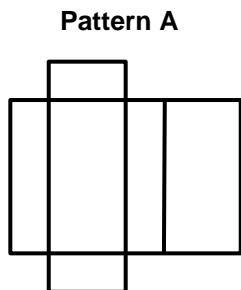**14.** Which patterns could be folded into a right triangular prism?

Pattern A	**Pattern B**	**Pattern C**	**Pattern D**

○ Pattern A   ○ Pattern B   ○ Pattern C   ○ **Pattern D**

15. Which pattern could **not** fold into a right rectangular prism?

Pattern A	**Pattern B**	**Pattern C**	**Pattern D**

○ Pattern A   ○ Pattern B   ○ **Pattern C**   ○ Pattern D

STOP

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