

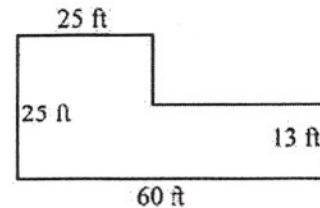
Name: _____

Class: _____

STAAR Spiral Review**(Read questions carefully and show ALL work!!!)**

- 1 J.T. can run 100 meters in 25 seconds. He plans to compete in a 400-meter race. Choose the correct problem-solving sequence of operations to determine how many seconds it will take J.T. to complete the race.
- A Set up a proportion. Multiply 100 times 400, then divide by 25.
- B Set up a proportion. Multiply 25 times 100, then divide by 400.
- C Set up a proportion. Multiply 25 times 400, then divide by 100.
- D Set up a proportion. Add 400 and 100, then divide by 25.
- 2 If an angle measures 22° , what would be the measure of its supplement?
- F 48°
- G 58°
- H 148°
- J 158°
- 3 A rectangle has sides of 12 inches and 1.5 feet. What is a reasonable estimate for the perimeter of the rectangle?
- A 27 inches
- B 13.5 inches
- C 30 inches
- D 60 inches

- 4 A farmer wants to put a fence around his field. The length and width of his field are shown below.



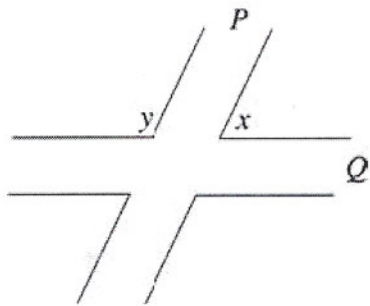
What is the perimeter, in yards, of the field?

- F 41 yards
- G 49 yards
- H $56\frac{2}{3}$ yards
- J 170 yards
- 5 Louis bought a picture frame that had a length of $15\frac{1}{4}$ inches and a perimeter of $53\frac{1}{2}$ inches. What is the width of the picture frame?
- A 11 inches
- B $11\frac{1}{2}$ inches
- C 23 inches
- D $30\frac{1}{2}$ inches

- 6 A triangle with two congruent sides and an angle of 90° is —
- F scalene and right
 - G isosceles and acute
 - H isosceles and right
 - J scalene and obtuse
- 7 A rectangular photograph is nine centimeters long and six centimeters wide. If the photograph is enlarged proportionally so that the length is 12 centimeters, what would be the width of the enlarged photograph?
- A 8 centimeters
 - B 9 centimeters
 - C 10 centimeters
 - D 12 centimeters
- 8 Identify the geometric properties that can NEVER be true of a quadrilateral in a plane.
- F A quadrilateral can contain two congruent diagonals forming 3 obtuse and 1 right angle.
 - G A quadrilateral can contain 2 right angles, one obtuse angle, and one acute angle.
 - H A quadrilateral can contain two congruent diagonals forming obtuse and acute angles.
 - J A quadrilateral can contain two congruent acute angles and two congruent obtuse angles.
- 9 If the area of a square is 81 square inches, find the perimeter of the square, and select the process that best justifies the solution.
- A 20.25 inches; divide the number of square units by 4
 - B 9 inches; find the square root of the area of the square
 - C 18 inches; find the square root of the area of the square, and multiply by 2
 - D 36 inches; find the square root of the area of the square, and multiply by 4
- 10 A square has an area of 105 square meters. Which of the following is the best estimate for the length of each side?
- F 8 meters
 - G 9 meters
 - H 10 meters
 - J 11 meters
- 11 A circular stained glass window has a diameter of 5 feet. What is the area, in square feet, of the stained glass window?
- A 15.7 square feet
 - B 19.63 square feet
 - C 31.40 square feet
 - D 61.62 square feet

- 12** Mr. Pulco noticed that a pair of supplementary angles on his drawings had a special relationship. The obtuse angle was double the measure of the acute angle. Find the measure of the two angles.
- F** 20 degrees and 140 degrees
G 60 degrees and 120 degrees
H 70 degrees and 110 degrees
J 90 degrees and 180 degrees

- 13** An engineer for the state department of transportation is redesigning two streets of a neighborhood. The map below represents the intersection of *P* Street and *Q* Street.

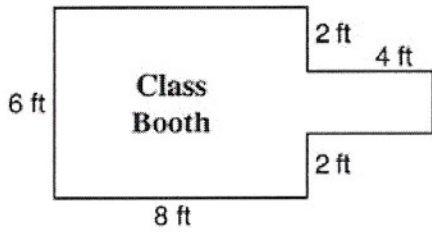


What is the relationship between angles *x* and *y*?

- 14** Nancy wants to fence in a dog run for her new puppy. She wants the dog run to be 5 feet by 10 feet. Write an equation to help her determine how many feet of fencing she needs to buy.

- 15** One of the largest cookies on record had a diameter of 78.75 feet. What was the circumference of the cookie? If the cookie were baked into the shape of a square, about how long would one side of the cookie measure. Approximate pi to 3.14. Round the solution to the tenths-place.

- 16 Jared and Jordan roped off a space for their science project at the school fair, as shown below.



If the rope costs \$1.50 per linear foot, what will be the total cost of the rope?
