Use the following information to answer question 1.

The letters on the number line below represent rational numbers.
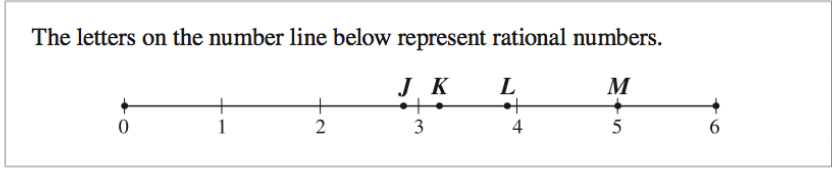
1. The approximate value of $\sqrt{15}$ is represented by the letter

   A. J
   B. K
   C. L
   D. M

22. In estimating $\sqrt{70}$, which two perfect square numbers provide the **best** two benchmarks to estimate your answer?

   A. 49 and 64
   B. 64 and 100
   C. 49 and 81
   D. 64 and 81

Use the following information to answer numerical-response question 6.

Pat arranges three portraits from smallest to largest based on area. Portrait 2 is square, and its side length, measured in centimetres, is a whole number.
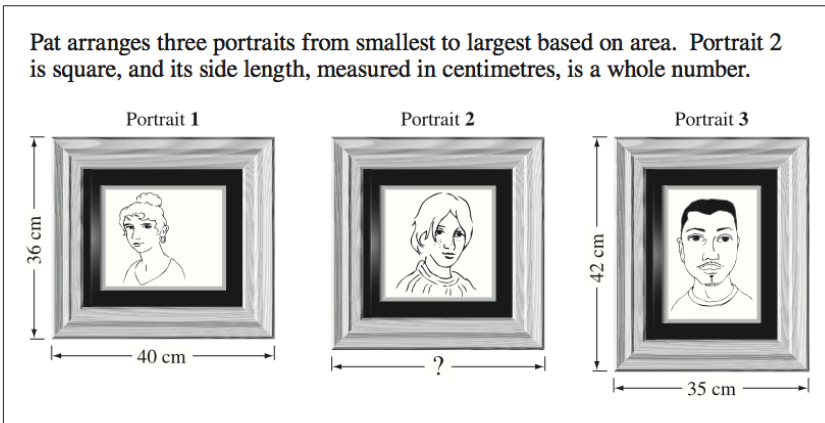
Numerical Response

6. The side length of portrait 2 is _____ cm.

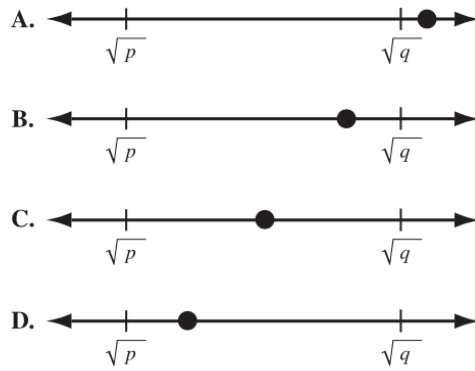   (Record your answer in the numerical-response section on the answer sheet.)

$$\sqrt{51} \quad \sqrt{55} \quad \sqrt{61} \quad \sqrt{66} \quad \sqrt{71} \quad \sqrt{77} \quad \sqrt{81} \quad \sqrt{88}$$

1. How many of the square roots shown above have a value that is between 7.8 and 8.8?

   A. 2
   B. 3
   C. 4
   D. 5

The letters p and q in the expression $\sqrt{\dfrac{p+q}{2}}$ represent consecutive perfect square numbers.

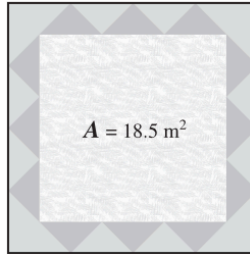3. Which of the following number lines **best** represents the value of $\sqrt{\dfrac{p+q}{2}}$?

   A.

   B.

   C.

   D.

Number 6

Name:_____

The area, A, of four square carpets is shown below.

Carpet 1

$A = 13 \text{ m}^2$

Carpet 2

$A = 18.5 \text{ m}^2$
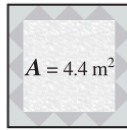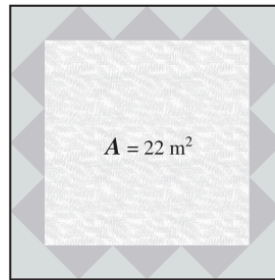
Carpet 3
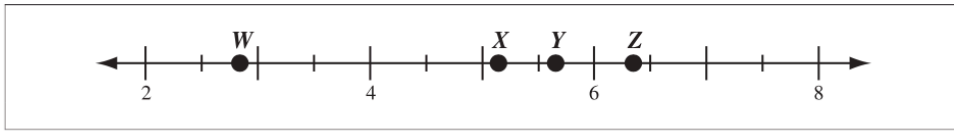
$A = 4.4 \text{ m}^2$

Carpet 4

$A = 22 \text{ m}^2$
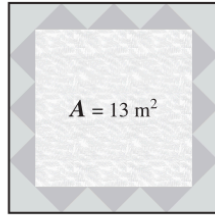
12. Which carpet will cover the most floor area, without touching a wall, when it is laid flat in a square room that has a width of 4.5 m?

    A.   Carpet 1

    B.   Carpet 2

    C.   Carpet 3

    D.   Carpet 4

Number 6   Name:_____

Use the following information to answer numerical-response question 6.

Numerical Response

6. Match each point on the number line above to the corresponding number in the table below.

Code	Number
1	$\sqrt{37}$
2	$\sqrt{8}$
3	$\sqrt{22}$
4	$\sqrt{41}$
5	$\sqrt{6}$
6	$\sqrt{50}$
7	$\sqrt{27}$
8	$\sqrt{32}$

Code: _____ _____ _____ _____
Point: *W*   *X*   *Y*   *Z*

(Record all **four digits** of your answer in the numerical-response section on the answer sheet.)

Number 6

Name:_____

Square **1**
Square **2**
Square **3**
Square **4**
Square **5**
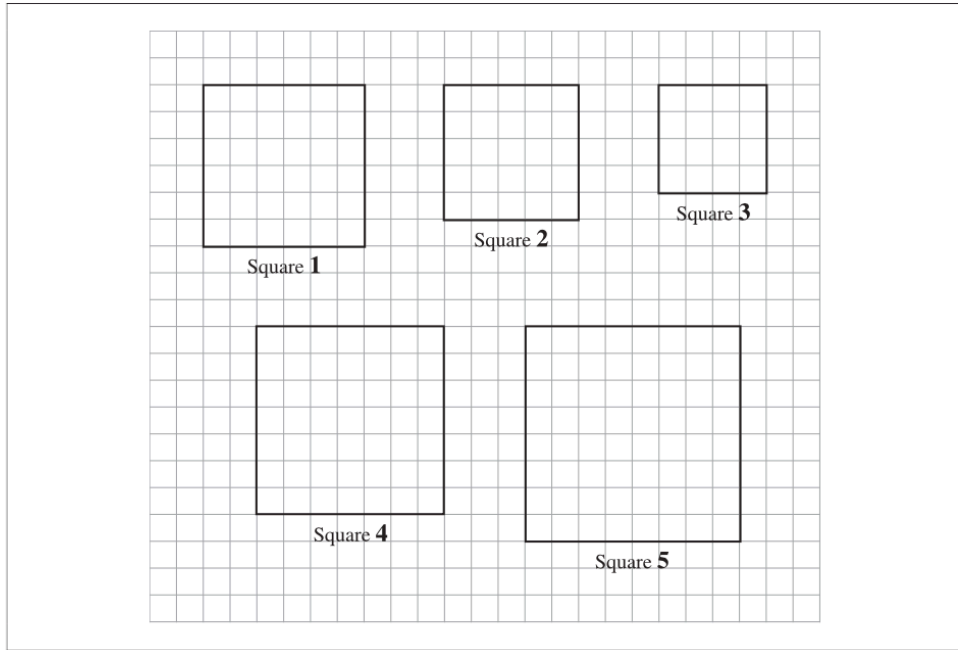
Numerical Response

10. Which two squares shown above represent the **best** benchmarks for estimating the value of $\sqrt{43}$?

Answer: Square _____ and Square _____

(Record **both digits** of your answer **in any order** in the numerical-response section on the answer sheet.)