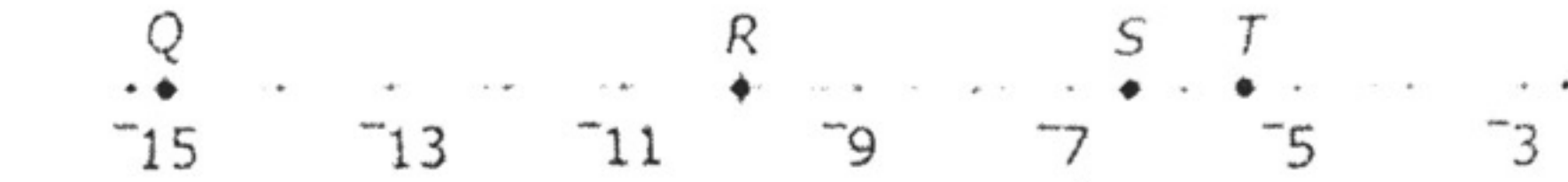


Name: _____

Key

Approximating Square Roots Homework

1) Which letter is located at about $-\sqrt{30}$ on the number line below?



- A Q
- B R
- C S
- D T

$$-\sqrt{36} \quad -\sqrt{30} \quad -\sqrt{25}$$

$\begin{matrix} = -6 & & = -5 \end{matrix}$

$-\sqrt{30}$ is between -5 and -6

2) The value of $\sqrt{27}$ is between which two consecutive integers?

- A 27 and 28
- B 13 and 14
- C 5 and 6
- D 2 and 3

$$\sqrt{25} \quad \sqrt{27} \quad \sqrt{36}$$

$\begin{matrix} = 5 & & = 6 \end{matrix}$

3) What is the approximate difference between $\sqrt{120}$ and $\sqrt{80}$?

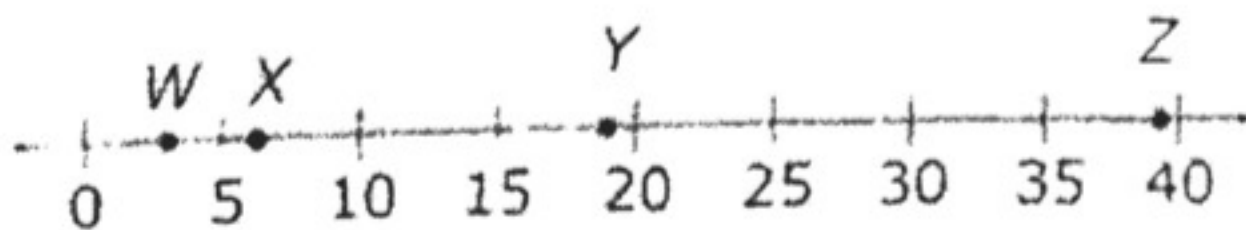
- A 2
- B 4
- C 20
- D 40

① $\sqrt{120}$ is approximately $\sqrt{121}$, which equals 11.
 $\sqrt{80}$ is approximately $\sqrt{81}$, which equals 9.
 ② Find the difference.
 $11 - 9 = 2$

4) Which number below is greater than 3 but less than 6?

- A $\sqrt{50}$ $\sqrt{49} \sqrt{50} \sqrt{64} \rightarrow$ not between 3 and 6.
- B $\sqrt{8}$ $\sqrt{4} \sqrt{8} \sqrt{9} \rightarrow$ too low, because it is less than 3.
- C $\sqrt{15}$ $\sqrt{9} \sqrt{15} \sqrt{16} \rightarrow$ yes, it is between 3 and 6.
- D $\sqrt{5}$ $\sqrt{4} \sqrt{5} \sqrt{9} \rightarrow$ too low, because it is less than 3.

5) Which point is located at approximately $\sqrt{39}$ on the number line below?



- A W
- B X
- C Y
- D Z

$$\sqrt{36} \quad \sqrt{39} \quad \sqrt{49}$$

$\begin{matrix} = 6 & & = 7 \end{matrix}$

$\sqrt{39}$ is between 6 and 7