**The Second Question: Sample Rigorous Items and Performance Items**

1. **Circle each solution that satisfies the question. You must select all answers. Explain how you know next to each circled answer.**

**Look point *P* on at the number line.**



**Look at number lines A – E. Is the point on each number line equal to the number shown by P?**



1. **A rectangular room is 12 feet long and has a perimeter of 132 feet. What is the width of this room? Explain how you solved this problem.**

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1. **The two-eyed space creatures, three-eyed space creatures, and four-eyed space creatures are having a contest to create a group with 24 total eyes.**



**How many two-eyed space creatures are needed to make a group with 24 total eyes?**

**How many three-eyed space creatures are needed to make a group with 24 total eyes?**

**How many four-eyed space creatures are needed to make a group with 24 total eyes?**

**Somebody told the five-eyed space creatures that they could not join the contest. Explain why five-eyed space creatures cannot make a group with 24 eyes.**

1. **Sandra is filling bags with sand. All the bags are the same size. Each bag must weigh less than 50 pounds. One sand bag weighs 58 pounds, another sand bag weighs 41 pounds, and another sand bag weighs 53 pounds. Explain with words and pictures whether Sandra can pour sand between sand bags so that the weight of each bag is less than 50 pounds.**
2. **Five 12-year old runners compete in the 100-yard dash. The finish line for each runner is shown below:**

**Pedro = 15.34 seconds Bob = 15.41 seconds Raul = 15.28 seconds**

**Victor = 15.70 seconds DiAndre = 15.41 seconds**

**If the fastest time wins, who won the race?**

**Explain how the results of the race would change if the race used a clock that rounded to the nearest tenth.**

**Dan Mulligan, flexiblecreativity.com, 2017 – 2018**