Tasks Selected for Sort

Task
Task #1

This line plot shows the number of letters in the names of 7 students.

```
    X
    X                       X
    X    X         X        X
  ◄──┼────┼────┼────┼────┼────┼────┼──►
    5    6    7    8    9    10   11
```
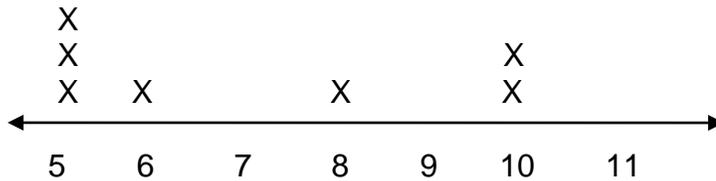
Determine the balance point for this set of data and explain how you arrived at this answer.

Adapted from EPAT practice items, VDOE, Grade 6, 2010

Task
Task #2

Determine the value of each expression.

10^3 10^2 10^1 10^0 $\mathbf{10^{-1}}$ $\mathbf{10^{-2}}$ $\mathbf{10^{-3}}$

Graph each of these values on the same number line. What do you notice? List three true statements about your graph.

Task

Task #3

Jordan and Paul were comparing two numbers. Jordan said, "My number is greater than your number." Paul said, "That may be true, but the absolute value of my number is greater than your number." Locate Jordan and Paul's number on a number line and explain your reasoning. Compare your answers with three other classmates. What do you notice?

Task

Task #4

Your job is to design plastic containers for ice cream sprinkles. Design and sketch containers in the shape of a right triangular prism, a rectangular prism, and a right circular cylinder. Each must fit on a shelf space that is 12 cm tall, 6 cm wide and 6 cm deep. Sketch each and label with dimensions. Explain which container will hold the most sprinkles for the given shelf space.

Which container design would save money by using less plastic?
Explain your reasoning.

Task

Task #5

Hannah made 54 cupcakes for Erin's birthday party. She made half of the cupcakes chocolate and half of the cupcakes yellow. She put sprinkles on 1/3 of the chocolate ones. She put one candle on each of the 2/3 chocolate cupcakes that did not have sprinkles. How many candles did Erin have to blow out?

Task

Task #6

A box shaped like a rectangular prism has a volume of 360 cubic inches. This box has a width of 6 inches and a length of 10 inches.
    a. What is the height of the box?
    b. If you doubled the length, what would be the new volume?
Explain how you found each.

-Adapted from MCAS, Grade 8, 2011

Task

Task #7

Identify each number that has an absolute value of 4.
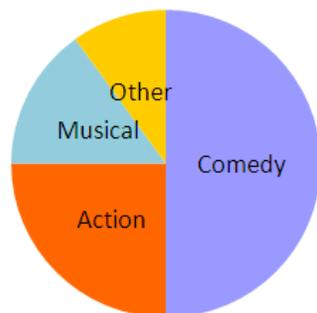
16   4   2   1/4   0   -2   -4   -16

From: EPAT practice items, VDOE, Grade 6, 2010

Task

Task #8
Cindy surveyed 60 students about their favorite type of movie. This circle graph represents the results of the survey.

Favorite Movies

Construct a bar _____ ent the same set of data.

Adapted from EPAT practice items, VDOE, Grade 6, 2010

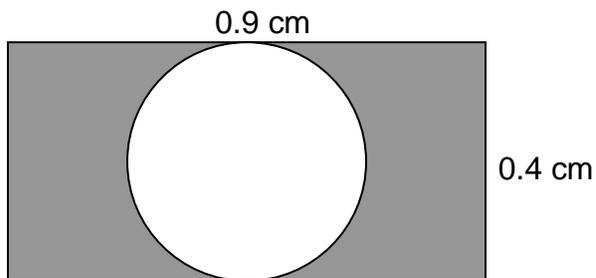| Task |
| --- |

 Task #9

What is the value of $2x^2 + 5(x^3 - 4)$ when $x = 3$?

Task

Task #10

A rectangle as shown has a length of 0.9 centimeters and a width of 0.4 centimeters. A circle is drawn inside that touches the rectangle at two points.

0.9 cm

0.4 cm

What is the total area of the unshaded region in the rectangle?

From: EPAT practice items, VDOE, Grade 8, 2010