

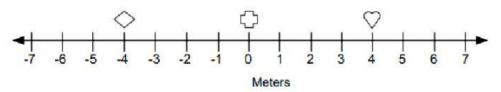
# Elite private school/ Physics department Grade 11

Worksheet #1

# Introduction to Position, Distance, and Displacement (L1)

## Question 1:

Use the number line below to give the positions of the objects (Don't forget units!):

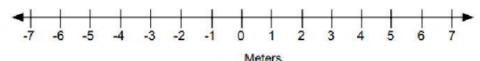


- What is the position of the heart? \_\_\_\_\_
- What is the position of the diamond? \_\_\_\_\_\_
- What is the position of the cross?

# Question 2:

### **Locating Positions:**

Draw the object at the indicated locations:



- 4. Put an "s" at the 2 m mark.
- 5. Put a "d" at the -6 m mark.
- 6. Put a "k" at the 7 m mark.
- 7. Put an "e" at the -1 m mark.



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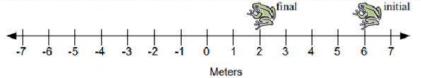
#### Worksheet #1

# Introduction to Position, Distance, and Displacement (L2)

## Question 3:

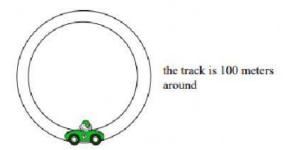
#### Changing positions:

Objects often change positions. In this activity, find the initial and final positions of objects.



- What is the initial position of the frog?
- 9. What is the final position of the frog?
- 10. If the frog traveled in a straight line from the initial position to the final position, what distance did it travel? \_\_\_\_\_

## Question 4:



- 11. If the car travels once around the racetrack, what distance does it travel?
- 12. If the car travels twice around the racetrack, what distance does it travel?
- 13. If the car travels once around the racetrack, what is its displacement?





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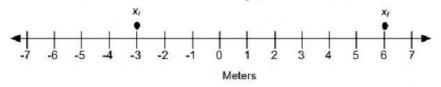
#### Grade 11

#### Worksheet #1

# Introduction to Position, Distance, and Displacement (L3)

## Question 5:

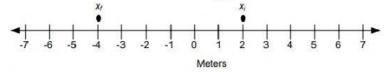
Use the number line below to answer the following questions:



- 14. Is the initial position positive or negative?
- 15. Is the final position positive or negative?
- 16. Is the displacement positive or negative?
- 17. What is the displacement [size (with units) and direction (+ or -)]?

## Question 6:

Use the number line below to answer the following questions:



- 18. Is the initial position positive or negative?
- 19. Is the final position positive or negative? \_\_\_\_\_\_
- 20. Is the displacement positive or negative?
- 21. What is the displacement [size (with units) and direction (+ or -)]?