Constant Motion Quiz 1

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Section 1: Distance and Displacement

1. A yard stick goes on a walk, and makes the following movements: 1. 2 meters left 2. 16 meters right 3. 24 meters left 4. 31 meters left What is the total distance and net displacment of the yard stick?

2. A crown jewel goes on a walk, and makes the following movements: 1. 3 meters right 2. 26 meters right 3. 30 meters left 4. 29 meters right What is the total distance and net displacment of the crown jewel?

3. A horse and buggy goes on a walk, and makes the following movements: 1. 2 meters South 2. 12 meters South 3. 39 meters South 4. 6 meters North What is the total distance and net displacment of the horse and buggy?

## Section 2: Constant Speed

4. A stunt-seeking daredevil moves 1107 meters over 27 seconds. How fast was the stunt-seeking daredevil moving?

5. A physics student moves 589 meters over 19 seconds. How fast was the physics student moving?

6. A statue moves at 30 m/s, covering 780 meters of distance. How long did it take to do this?

7. A tennis ball moves 630 meters over 35 seconds. How fast was the tennis ball moving?

8. A football spends 24 seconds moving at 11 m/s. How much distance was travelled?

## Section 3: Average Speed

9. A baseball travels 1824 meters in 48 seconds, then 288 meters in 12 seconds. What is the average speed of the baseball?

10. A baseball travels 736 meters in 32 seconds, then 1426 meters in 46 seconds. What is the average speed of the baseball?

11. A barrel of monkeys travels at 24 m/s for 15 seconds, then 17 m/s over 459 meters. What is the average speed of the barrel of monkeys?

12. A block of ice travels at 44 m/s for 40 seconds, then 10 m/s over 130 meters. What is the average speed of the block of ice?

## Section 4: Average Velocity

13. A vacant doghouse travels at 29 m/s to the right for 14 seconds, then 35 m/s to the left over 1715 meters. What is the average velocity of the vacant doghouse?

14. A kitschy porcelain figurine travels at 25 m/s to the left for 22 seconds, then 17 m/s to the right over 238 meters. What is the average velocity of the kitschy porcelain figurine?

15. A tuba travels at 31 m/s to the right for 21 seconds, then 44 m/s to the left over 1716 meters. What is the average velocity of the tuba?

16. A jar of rephlogisticated air travels at 27 m/s to the right for 47 seconds, then 26 m/s to the left over 624 meters. What is the average velocity of the jar of rephlogisticated air?

17. A potted fern travels at 10 m/s to the right for 33 seconds, then 46 m/s to the left over 2254 meters. What is the average velocity of the potted fern?

## Section 5: Combined Constant

18. A literal horse travels at 16 m/s to the right for 38 seconds, then 19 m/s to the left over 475 meters. What is the total distance travelled by the literal horse? What is the net displacement? What is the average speed of the literal horse? The average velocity?

19. A horse and buggy travels at 24 m/s to the right for 40 seconds, then 30 m/s to the left over 1320 meters. What is the total distance travelled by the horse and buggy? What is the net displacement? What is the average speed of the horse and buggy? The average velocity?

20. A kindergartener's action figure travels at 38 m/s to the left for 21 seconds, then 14 m/s to the right over 182 meters. What is the total distance travelled by the kindergartener's action figure? What is the net displacement? What is the average speed of the kindergartener's action figure? The average velocity?

21. A priceless artifact travels at 22 m/s to the left for 25 seconds, then 25 m/s to the right over 1050 meters. What is the total distance travelled by the priceless artifact? What is the net displacement? What is the average speed of the priceless artifact? The average velocity?

22. A kindergartener's action figure travels at 34 m/s to the left for 47 seconds, then 43 m/s to the right over 2064 meters. What is the total distance travelled by the kindergartener's action figure? What is the net displacement? What is the average speed of the kindergartener's action figure? The average velocity?

Answer Key - All Versions

## Version 1

### Section 1: Distance and Displacement

1. [73, 41, 'left']

2. [88, 28, 'right']

3. [59, 47, 'South']

### Section 2: Constant Speed

4. [41]

5. [31]

6. [26]

7. [18]

8. [264]

### Section 3: Average Speed

9. [35.2]

10. [27.718]

11. [19.5]

12. [35.66]

### Section 4: Average Velocity

13. [-20.778]

14. [-8.667]

15. [-17.75]

16. [9.085]

17. [-23.463]

### Section 5: Combined Constant

18. [1083, 133, 17.19, 2.111]

19. [2280, -360, 27.143, -4.286]

20. [980, -616, 28.824, -18.118]

21. [1600, 500, 23.881, 7.463]

22. [3662, 466, 38.547, 4.905]