# Mathematics 9
## Course Review (2)

1. Use the data in the table to answer each question.

| Time (s) | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|
| Distance (m) | 0 | 4 | 8 | 12 | 16 | 20 | 24 |

   a) Which quantity is the independent variable? The dependent variable?
   b) Plot the ordered pairs on a graph.
   c) Is this relationship linear or nonlinear?
   d) Estimate the distance traveled in 2.5 s, 6.25 s, and 8 s.
   e) Estimate the time taken to travel 3 m, 21 m, and 36 m.

2. The data for 12 professional basketball players is given in the chart.

| Most Points in One Game | Disqualifications in One Season |
|---|---|
| 55 | 0 |
| 33 | 1 |
| 27 | 0 |
| 19 | 0 |
| 19 | 3 |
| 27 | 1 |
| 14 | 5 |
| 16 | 0 |
| 11 | 0 |
| 14 | 1 |
| 14 | 0 |
| 16 | 0 |

   a) Draw a scatter plot.
   b) If there is a relationship, draw a line of best fit.

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**Answers:**

1  a) time is indep.          b) linear                    d) 10m, 25m, 32m        e) 0.75s, 5.25s, 9s

2. b) The data shows no correlation, so drawing a line of best fit is not appropriate.