## Advanced Logic Worksheet Solutions

TRACING LINES:


## GEARS:

Gears A and D rotate at the same speed. Gears of equal size will rotate at constant speeds irrespective of smaller or larger gears in between them.

## MISSING SYMBOL:



Each symbol is associated with another's position; this upside-down spade is always to the left of a right-side-up heart.

## FOUR TRACKS:

In $1 / 3$ of an hour ( 20 minutes), they travel $1 / 3$ of a mile $6,9,12$, and 15 times. The largest number these numbers are all divisible by is 3 . They return to their original positions 3 times in 20 minutes: after $62 / 3,131 / 3$, and 20 minutes.

## SUDOKU CHALLENGE:

| 4 | 8 | 3 | 2 | 6 | 5 | 7 | 1 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 9 | 5 | 7 | 4 | 3 | 1 | 8 | 2 | 6 |
| 1 | 6 | 2 | 7 | 8 | 9 | 3 | 5 | 4 |
| 8 | 2 | 1 | 9 | 7 | 3 | 6 | 4 | 5 |
| 7 | 9 | 4 | 5 | 1 | 6 | 2 | 8 | 3 |
| 6 | 3 | 5 | 8 | 4 | 2 | 9 | 7 | 1 |
| 5 | 7 | 8 | 3 | 9 | 4 | 1 | 6 | 2 |
| 2 | 1 | 9 | 6 | 5 | 7 | 4 | 3 | 8 |
| 3 | 4 | 6 | 1 | 2 | 8 | 5 | 9 | 7 |

