Rust Advanced Numerical Reasoning Appraisal

John Rust

Practice Test

DIRECTIONS

- Turn this booklet over and carefully tear off the back cover. Place it next to this booklet so that the words *Practice Test Record Form* are facing up. Don't look at the reverse of the Record Form as that's where the answers are.

- Read the instructions below and then do the practice test. Once you have done the test turn the Record Form over to check your answers.

- This booklet contains two types of test designed to find out how well you are able to reason numerically.

- *Each test has separate directions that should be read carefully.*

- All answers are to be marked on the separate Record Form. Use a sharp pencil. If you wish to change an answer, make sure that you erase your old answer completely.

Test 1: Comparison of Quantities

DIRECTIONS

This test requires you to make a comparison between two quantities, A and B. For some of the exercises, additional information is given which should also be used in your determination of quantity. For each exercise you will find spaces on the Record Form labelled A, B, E and I. Put crosses on the Record Form under the appropriate heading as follows:

A: if the quantity under A is greater than the quantity under B.

B: if the quantity under B is greater than the quantity under A.

E: if the quantities under A and B are equal.

I: if insufficient information is given to make the comparison.

Study these examples before starting the test.

EXAMPLE

1.

A	**B**
The price of 2 kilograms of sugar at 46p per kilogram.	The price of 3 kilograms of sugar at 31p per kilogram.

Two kilograms of sugar at 46p per kilogram cost 2 × 46p = 92p.
Three kilograms of sugar at 31p cost 3 × 31p = 93p.
As 93p is greater than 92p the figure in column B is greater, thus the correct answer is B.

```
        A   B   E   I
   1    ○   ⊗   ○   ○
```

2. A bag contains 3 black balls, 2 red balls and 1 green ball.

A	**B**
The probability of randomly picking a black ball.	The probability of randomly picking a ball that is not black.

The probability of randomly picking 3 balls out of 6 is 0.5, and this is true whatever the colour of balls picked. Thus, the quantities in columns A and B are equal, and the correct answer is E.

```
        A   B   E   I
   2    ○   ○   ⊗   ○
```

1. You are dealt four cards from a well-shuffled standard pack of 52 playing cards (containing no jokers).

A	**B**
The probability of being dealt 4 aces.	The probability of being dealt the 4, 5, 6 and 7 of diamonds.

2.

A	**B**
The percentage increase in property tax represented by a change from £75 per month to £100 per month	25%

Test 2: Sufficiency of Information

DIRECTIONS

This test consists of exercises in which you are given a question and two statements, labelled (1) and (2), which give certain information. You are asked to decide whether the information given in the two statements is sufficient to answer the question, either separately or in combination.

Using your everyday knowledge of the world and of mathematics, plus the information given in the statements, you must mark response categories A, B, C, D or E as follows:

A: If statement 1 ALONE is sufficient, but statement 2 alone is not sufficient to answer the question.

B: If statement 2 ALONE is sufficient, but statement 1 alone is not sufficient to answer the question.

C: If BOTH statements 1 and 2 TOGETHER are sufficient to answer the question, but NEITHER statement ALONE is sufficient.

D: If EACH statement ALONE is sufficient to answer the question asked.

E: If statements 1 and 2 together are NOT sufficient to answer the question asked.

EXAMPLE

1. Sean is worth his weight in gold. How heavy is he?

(1) Sean is lighter than any of his brothers or sisters.

(2) One of Sean's sisters weighs 82 kilograms.

Statement 1 only tells us about Sean's weight in comparison to his brothers and sisters. Statement 2 only tells us about the weight of one of his sisters. Hence neither of the statements, either separately or together, are sufficient for us to answer the question, and the correct answer is E. (The fact that Sean is worth his weight in gold is irrelevant).

	A	B	C	D	E
1	○	○	○	○	⊗

2. How much faster is a jet than a propeller driven aircraft?

(1) The propeller driven aircraft flies at 300 mph.

(2) The jet flies at 900 kph (1 kph = 1.609344 mph).

This question is about relative speed. Statement 1 tells us the speed of one of the aircraft. Statement 2 gives us the speed of the other aircraft. Neither of these statements on their own is sufficient to answer the question. But we can answer the question with both pieces of information taken together. Hence the correct answer is C.

	A	B	C	D	E
2	○	○	⊗	○	○

1. **In a greengrocer's store, Nicola potatoes cost twice as much as Maris Piper potatoes, which are more expensive than King Edward potatoes. How much per Kilo are Nicola potatoes?**

(1) Maris Piper potatoes cost 10p per Kilo more than King Edward potatoes.	(2) King Edward potatoes cost 30p per Kilo.

2. **What is the distance from one corner of a square field to the diagonally opposite corner?**

(1) The area of the field is 10,000 square metres.	(2) The distance all the way round the field is 400 metres.

RUST ADVANCED NUMERICAL REASONING APPRAISAL
Answers to Practice Test

Number Correct ....

Number Wrong ....

Test 1: Comparison of Quantities

1 E

2 A

Test 2: Sufficiency of Information

3 C

4 D

Practice Test Record Form

Candidate Details

SURNAME ....   FIRST NAME ....

DATE OF TEST ....

INSTRUCTIONS TO CANDIDATES

The answers are on the reverse of this sheet. So do not turn over until you have completed the entire test.

Test 1: Comparison of Quantities

	A	B	E	I
1	○	○	○	○

	A	B	E	I
2	○	○	○	○

Test 2: Sufficiency of Information

	A	B	C	D	E
3	○	○	○	○	○

	A	B	C	D	E
4	○	○	○	○	○