

Numerical Reasoning Practice Test

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Practice Questions

Here are some practice examples to show you what the questions on the real test are like

Question P1

The numbers in the grid go together in a certain way.

What is the missing number?

| | | |
|---|---|---|
| 1 | 2 | 3 |
| 3 | 5 | 6 |
| 7 | 8 | ? |

A: 6 **B:** 7 **C:** 8 **D:** 9 **E:** 10

Question P2

What is the next number in the sequence?

1, 2, 3, 4, 5

A: 6 **B:** 7 **C:** 8 **D:** 9 **E:** 10

Question P3

The following number pairs go together in a certain way.

Find the missing number.

1, 2

3, 6

7, 14

6, 12

5, ?

A: 10 **B:** 11 **C:** 12 **D:** 13 **E:** 14

You will have **30 minutes** to do as many questions as you can.
Calculators are not permitted
Please do not turn this page until you are asked to do so.

Question 1

A sequence of numbers is changing by the same amount each time. The sixth, seventh and eighth numbers are 21, 28 and 35. What is the tenth term?

A: 54 **B:** 52 **C:** 51 **D:** 49 **E:** 57

Question 2

The following groups of three numbers go together in a certain way. Find the missing number.

$$19, 29, \frac{46}{32}$$

$$25, 25, \frac{42}{38}$$

$$18, 28, \frac{45}{31}$$

$$26, 17, \frac{34}{39}$$

$$28, 20, ?$$

A: $\frac{37}{41}$ **B:** $\frac{32}{41}$ **C:** $\frac{30}{48}$ **D:** $\frac{37}{36}$ **E:** $\frac{37}{46}$

Question 3

The following groups of three numbers go together in a certain way. Find the missing number.

$$24, 30, 1476$$

$$15, 17, 514$$

$$16, 20, 656$$

$$14, 18, 520$$

$$22, 14, ?$$

A: 690 **B:** 680 **C:** 710 **D:** 670 **E:** 700

Question 4

The numbers in the grid go together in a certain way. What is the missing number?

| | | |
|-----|-----|----|
| 21 | 25 | 24 |
| 17 | 27 | 12 |
| 357 | 675 | ? |

A: 288 B: 297 C: 298 D: 286 E: 281

Question 5

In a farm there are only chickens and cows. Each chicken has 2 legs. Each cow has 4 legs. Given the total number of animals is 32 and the total number of legs is 106. How many cows are there in the farm?

A: 16 B: 12 C: 31 D: 21 E: 24

Question 6

In a farm there are only chickens and cows. Each chicken has 2 legs. Each cow has 4 legs. Given the total number of chickens is 11 and the total number of legs is 122. How many cows are there in the farm?

A: 21 B: 27 C: 25 D: 35 E: 33

Question 7

The numbers in the grid go together in a certain way. What is the missing number?

| | | |
|----|-----|----|
| 16 | 18 | 25 |
| 34 | 59 | 43 |
| 93 | 136 | ? |

A: 94 B: 99 C: 108 D: 95 E: 102

Question 8

A fruit shop pays \$256 for 64 apples. It sells 4 apples for the same price it paid for 9 apples. What was the profit the fruit shop made on 64 apples?

A: 310 B: 576 C: 320 D: 596 E: 586

Question 9

The numbers in the grid go together in a certain way. What is the missing number?

| | | |
|----|----|----|
| 25 | 26 | 51 |
| 17 | 27 | 44 |
| 14 | 12 | ? |

A: 36 B: 26 C: 18 D: 29 E: 20

Question 10

The following groups of three numbers go together in a certain way.
Find the missing number.

20, 120, 400

25, 150, 625

29, 174, 841

16, 96, 256

14, 84, ?

A: 7066 B: 202 C: 7056 D: 206 E: 196

Question 11

Find the next number in the following sequence

25, 25, 48, 41, 71, 57

A: 78 B: 73 C: 94 D: 68 E: 99

Question 12

Find the missing number and letter in the following sequence

6, ?, ?, *K*, 8, *H*, 26, *Z*, 16, *P*, 20, *T*

A: *F*, 8 B: *F*, 12 C: *F*, 11 D: *G*, 9 E: *F*, 14

Question 13

The following groups of three numbers go together in a certain way.
Find the missing number.

26, 13, $\frac{38}{41}$

14, 16, $\frac{26}{44}$

12, 22, $\frac{24}{50}$

24, 18, $\frac{36}{46}$

19, 14, ?

A: $\frac{31}{42}$ B: $\frac{38}{35}$ C: $\frac{26}{42}$ D: $\frac{31}{37}$ E: $\frac{36}{42}$

Question 14

The following number pairs go together in a certain way.

Find the missing number.

22, 506

29, 870

11, 132

18, 342

27, ?

A: 727 B: 702 C: 766 D: 756 E: 729

Question 15

The numbers in the grid go together in a certain way.

What is the missing number?

22 35 48

38 51 64

54 67 ?

A: 85 B: 84 C: 82 D: 79 E: 80

Question 16

Find the next number in the following sequence

29, 232, 1856, 14848, 118784

A: 950292 B: 950262 C: 950282 D: 950272 E: 950302

Question 17

Consider all the whole numbers between 185 and 319 including 185 and 319.

How many end in 7?

A: 23 B: 18 C: 16 D: 7 E: 14

Question 18

Find the missing number and letter in the following sequence

441, *U*, 9, ?, 100, *J*, 256, *P*, 676, *Z*, ?, *V*

A: *C*, 482 **B:** *C*, 483 **C:** *C*, 485 **D:** *C*, 484 **E:** *C*, 486

Question 19

The following groups of three numbers go together in a certain way.
Find the missing number.

7, 11, 241

5, 5, 85

6, 12, 226

11, 3, 109

9, 10, ?

A: 270 **B:** 280 **C:** 290 **D:** 265 **E:** 310

Question 20

Find the next number in the following sequence

18, 43, 68, 93, 118

A: 146 **B:** 148 **C:** 168 **D:** 138 **E:** 143

Question 21

The numbers in the grid go together in a certain way.
What is the missing number?

9 121 361

49 225 529

121 361 ?

A: 720 **B:** 729 **C:** 737 **D:** 732 **E:** 736

Question 22

In a farm there are only chickens and cows. Each chicken has 2 legs. Each cow has 4 legs. Given the total number of animals is 56 and the total number of legs is 172. How many chickens are there in the farm?

A: 23 **B:** 27 **C:** 33 **D:** 36 **E:** 26

Question 23

The numbers in the grid go together in a certain way. What is the missing number?

| | | |
|------|------|-----|
| 15 | 35 | 55 |
| 135 | 315 | 495 |
| 1215 | 2835 | ? |

A: 4455 **B:** 4461 **C:** 4456 **D:** 4450 **E:** 4453

Question 24

The following groups of three numbers go together in a certain way. Find the missing number.

30, 60, 270

25, 50, 225

19, 38, 171

12, 24, 108

17, 34, ?

A: 34 **B:** 163 **C:** 173 **D:** 153 **E:** 44

Question 25

A sequence of numbers is changing by the same amount each time. The fifth, sixth and seventh numbers are 20, 29 and 38. What is the sum of the first 10 terms?

A: 239 **B:** 245 **C:** 236 **D:** 252 **E:** 249

Question 26

Find the next number in the following sequence

10, 28, 46, 74, 120, 194

A: 296 **B:** 314 **C:** 222 **D:** 304 **E:** 388

Question 27

Consider a positive whole number x . When x is divided by 10 the remainder is 9. When x is divided by 11 the remainder is 6. When x is divided by 3 the remainder is 0. Which of the following is a possible value for x ?

A: 39 **B:** 28 **C:** 36 **D:** 42 **E:** 50

Question 28

A house, shop and park lie on a straight line. The shop lies between the house and the park. The distance between the house and the shop is $\frac{17}{29}$ of the distance between the house and the park. The distance between the house and the park is 290. A man goes from the house to the shop to the house to the park. What is the total distance travelled by the man?

A: 600 **B:** 620 **C:** 640 **D:** 630 **E:** 650

Question 29

The numbers in the grid go together in a certain way. What is the missing number?

| | | |
|----|----|-----|
| 20 | 25 | 500 |
| 30 | 12 | 360 |
| 22 | 16 | ? |

A: 361 **B:** 353 **C:** 352 **D:** 356 **E:** 346

Question 30

In a farm there are only chickens and cows. Each chicken has 2 legs. Each cow has 4 legs. Given the total number of cows is 11 and the total number of legs is 64. How many chickens are there in the farm?

A: 7 **B:** 4 **C:** 2 **D:** 10 **E:** 8

Question 31

Each tree contains 6 branches. Each branch contains 8 leaves. How many trees are there given there are 144 leaves?

A: 7 **B:** 3 **C:** 1 **D:** 8 **E:** -6

Question 32

Consider all the whole numbers between 130 and 371 including 130 and 371. How many are the same when their digits are reversed? (e.g 121)

A: 24 **B:** 19 **C:** 25 **D:** 28 **E:** 33

Question 33

Find the missing number and letter in the following sequence

21, *F*, 12, *O*, 7, *T*, 26, ?, 20, *G*, ?, *N*

A: *A*, 14 **B:** *B*, 9 **C:** *B*, 15 **D:** *A*, 13 **E:** *B*, 17

Question 34

Consider all the whole numbers between 156 and 396 including 156 and 396. How many have digits that sum to 13?

A: 26 **B:** 16 **C:** 18 **D:** 22 **E:** 20

Question 35

A house, shop and park lie on a straight line. The shop lies between the house and the park. The distance between the house and the shop is 150 and the distance between the house and the park is 410. A man goes from the house to the park to the shop to the park. What is the total distance travelled by the man?

A: 930 **B:** 960 **C:** 970 **D:** 900 **E:** 950

Question 36

The following number pairs go together in a certain way. Find the missing number.

19, 361

16, 256

14, 196

13, 169

26, ?

A: 675 **B:** 666 **C:** 674 **D:** 676 **E:** 686

Question 37

Consider all the whole numbers between 141 and 339 including 141 and 339. How many leave a remainder of 7 when divided by 7?

A: -4 **B:** 2 **C:** -5 **D:** 0 **E:** -2

Question 38

The following number pairs go together in a certain way. Find the missing number.

25, 325

19, 190

13, 91

30, 465

27, ?

A: 756 **B:** 368 **C:** 388 **D:** 378 **E:** 373

Question 39

The following groups of three numbers go together in a certain way. Find the missing number.

26, 14, 106

21, 29, 121

23, 23, 115

25, 18, 111

22, 13, ?

A: 92 **B:** 102 **C:** 97 **D:** 82 **E:** 87

Question 40

Find the missing number and letter in the following sequence

35, *C*, 61, ?, 87, *G*, ?, *I*, 139, *K*, 165, *M*

A: *E*, 111 **B:** *F*, 116 **C:** *E*, 113 **D:** *F*, 110 **E:** *F*, 114

Question 41

A sequence of numbers is changing by the same amount each time. The sixth, seventh and eighth numbers are -4, 0 and 4. What is the first term?

A: -21 **B:** -33 **C:** -25 **D:** -24 **E:** -30

Question 42

Each house contains 4 rooms. Each room contains 2 doors. How many doors are there in 3 houses?

A: 24 **B:** 16 **C:** 19 **D:** 34 **E:** 32

Question 43

The following number pairs go together in a certain way. Find the missing number.

20, 380

26, 650

17, 272

14, 182

28, ?

A: 822 **B:** 812 **C:** 782 **D:** 784 **E:** 756

Question 44

The following number pairs go together in a certain way. Find the missing number.

10, 92

19, 173

27, 245

28, 254

13, ?

A: 129 **B:** 119 **C:** 139 **D:** 169 **E:** 117

Question 45

Two numbers are each multiplied by themselves to give two new numbers. The difference between the two new numbers is -64. The difference between the two original numbers is -4. What is the sum of the two original numbers?

- A:** 9 **B:** 16 **C:** 10 **D:** 23 **E:** 22

Question 46

A house, shop and park lie on a straight line. The shop lies between the house and the park. The distance between the shop and the park is 100. A man goes from the house to the shop to the house to the park. The total distance travelled by the man is 790. What is the distance between the house and the shop?

- A:** 230 **B:** 190 **C:** 210 **D:** 220 **E:** 250

Question 47

A bucket contains 21 apples and 20 oranges. 11 of the fruits are rotten. What is the minimum number of rotten apples?

- A:** 20 **B:** 11 **C:** 0 **D:** 30 **E:** 21

Question 48

The numbers in the grid go together in a certain way. What is the missing number?

| | | |
|----|----|----|
| 15 | 11 | 16 |
| 25 | 29 | 10 |
| 40 | 40 | ? |

- A:** 26 **B:** 31 **C:** 18 **D:** 36 **E:** 17

Question 49

One bucket contains 19 kilograms of sand and another bucket contains 39 kilograms of sand. How many kilograms must be transferred from one bucket to the other, so each has an equal amount of sand?

- A:** 5 **B:** 30 **C:** 20 **D:** 10 **E:** 25

Question 50

The following number pairs go together in a certain way.

Find the missing number.

22, 231

29, 406

11, 55

12, 66

25, ?

A: 300

B: 295

C: 600

D: 310

E: 290