# GRE QUANT PRACTICE PAPER

1. $\frac{4}{x} = \frac{2}{25}$
   Find *x*.

select

None

select

$50$

select

$0.25$

select

$\frac{25}{8}$

select

$\frac{8}{25}$

2. A jet goes from City 1 to City 2 at an average speed of 600 miles per hour, and returns along the same path at an average speed if 300 miles per hour. What is the average speed, in miles per hour, for the trip?

select

350miles/hour

select

300miles/hour

select

400miles/hour

select

450miles/hour

select

500miles/hour

3. An outpost has the supplies to last 2 people for 14 days. How many days will the supplies last for 7 people?

select

$10$

select

$4$

select

7

select

9

select

5

4. For all values of $x$, $f(x) = 7x^2 - 3$, and for all values of $y$, $g(y) = 2y + 9$. What is $g(f(x))$?

select

$14y^2 + 3$

select

$2x + 9$

select

$14x^2 + 3$

select

$7y^2 - 3$

select

$14x^2 - 3$

5. Factor $3u^4 - 24uv^3$.

select

$3u(u - 2v)(u^2 - 2uv - 4v^2)$

select

$3u(u - 2v)(u + 2v)$

select

$3u(u - 2v)(u^2 + 2uv + 4v^2)$

select

$3u(u^3 - 8v^3)$

select

$3u[u^3 - (2v)^3]$

6. Find the slope of the inequality equation $y-7<x+2y-14$

select

$-7$

select

1

select

7

select

–1

select

0

7. Audrey, Penelope and Clementine are all sisters. Penelope is 8 years older than Clementine and 2 years younger than Audrey. If the sum of Penelope and Clementine's age is Audrey's age, how old is Clementine's age?

select

4

select

2

select

8

select

3

8. Two palm trees grow next to each other in Luke's backyard. One of the trees gets sick, so Luke cuts off the top 3 feet. The other tree, however, is healthy and grows 2 feet. How tall are the two trees if the healthy tree is now 4 feet taller than the sick tree, and together they are 28 feet tall?

select

8 and 20 feet

select

cannot be determined

select

12 and 16 feet

select

14 and 14 feet

select

11 and 17 feet

9. Solve for x: $(x^2 – x) / (x – 1) = 1$

select

No solution

select

x = -2

select

x = 2

select

x = -1

select

x = 1

10. If $a \neq 0$, which of the following is equal to $(a^6 * a^2)^3 a^6$?

select

$a^{18}$

select

a

select

$a^6$

select

The answer cannot be determined from the above information

select

$a^4$

11. Fran has eight more chickens that Jan. If Fran gives two of her chickens to Jan, Fran will have twice as many chickens as Jan. How many chickens does Fran currently have (before giving two away to Jan)?

select

6

select

10

select

4

select

8

select

12

12. Which of the following is equivalent to $\frac{(\frac{1}{t} - \frac{1}{x})}{x - t}$ ? Assume that denominators are always nonzero.

select

x−t

select

t−x

select

(xt)−1

select

x2−t2

select

xt

13. Which of the following is equivalent to:
210−−−√+55−−√?

select

5462−−−√

select

57−√+11−−√

select

265−−−√

select

5−√(42−−√+11−−√)

select

730−−√+511−−√

14. Quantity A: 9
Quantity B: √(25 + 55)

select

Quantity B is greater.

select

The relationship cannot be determined from the information given.

select

Quantity A is greater.

select

The two quantities are equal.

Quantity A: $140\sqrt{\phantom{x}}-315\sqrt{\phantom{x}}$

Quantity B: $132\sqrt{\phantom{x}}-297\sqrt{\phantom{x}}$

15. Which of the following is true?

select

Quantity B is larger.

select

The two quantities are equal.

select

The relationship cannot be determined from the information provided.

select

Quantity A is larger.

16. Find the square root of the following decimal:
$0.00064\sqrt{\phantom{xxxxx}}$

select

0.8

select

0.0253

select

0.08

select

0.008

17. $4.8144*10^3$ is equal to which of the following?

select

$4814.4*10^2$

select

$0.048144*10^5$

select

$4814.4*10^3$

select

$4814.4 * 10^{-2}$

select

$48.144 * 10^{-1}$

18. Solve for x:

$3x8+12=13-2x$

select

432

select

10021

select

$-8113$

select

$-28057$

select

$-57$

19. One third of a diet bar is made of shredded fiber. Of the remaining portion, a third is made of apples and the remainder is made of soy. What is the ratio of shredded fiber to soy?

select

4:9

select

1:3

select

3:2

select

1:1

select

3:4

20. An elevated train traveling its night route drops off exactly 2/3 of all passengers currently on board at each stop. Assuming no more passengers board the train tonight, if two passengers get off at the fifth stop, how many passengers were originally on the train when it started its route?

select

243

select

27

select

300

select

2430

select

81

21. Quantitative Comparison:

Column A
$|-3 + 4|$

Column B
$|-3| + |4|$

select

Column A and B are equal

select

Column B is greater

select

Cannot be determined

select

Column A is greater

22. If $a$ is even, and $b$ is odd. Which of the following must be odd?

select

$ab+ab$

select

$ab$

select

$a^2b^3$

select

$abb+a$

select

abb−1

23. What is the least common multiple of 3, 4x, 5y, 6xy, and 10y?

select

$30x^2y^2$

select

$60x^2y^2$

select

25xy

select

30xy

select

60xy

0>x>y>z

24. Quantity A: x−z
Quantity B: x+y

select

The relationship cannot be determined from the information given.

select

Quantity B is greater

select

Quantity A is greater

select

The two quantities are equal

The sequence $s_n$ is defined by:

$$s_n = s_{n-1} - 21$$

$s_1=93$

25. What is the value of $s_{57}$?

select

−1176

select

−1083

select

−2014

select

−3914

select

−1104

26. If the sum of four consecutive numbers is 38, what is the mean of the largest and the smallest of the four numbers?

select

8.75

select

10.5

select

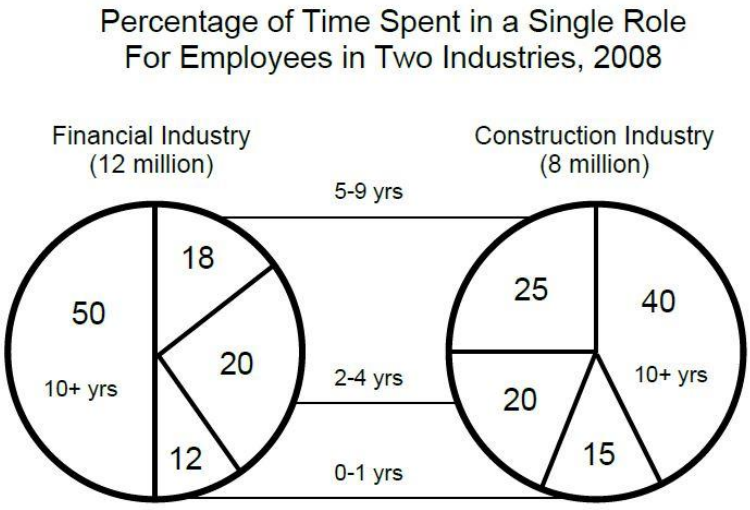
11.75

select

11

select

9.5




27. If one of the employees across both industries were to be selected at random, what is the

probability that the employee will be a construction industry worker who stayed in the same role for 5 years or more?

select

17%

select

10%

select

65%

select

26%

select

20%

28. What is the interest rate on an account if an original balance of $12050 rises to $12670 after one year if it is only compounded yearly?

select

6.15%

select

5.15%

select

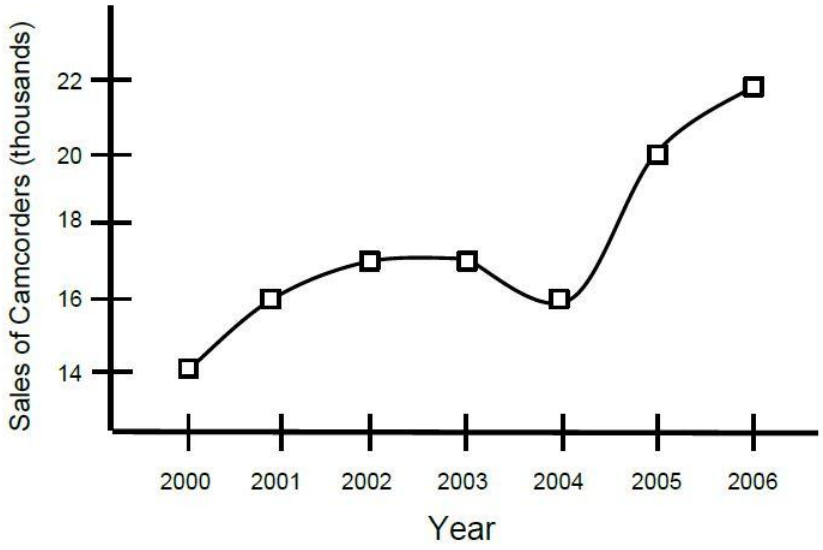
4.25%

select

3.24%

select

1.05%




29. According to the graph above, what was the percent change in the sales of camcorders from 2002-2006?

select
36%
select
29%
select
17%
select
40%
select
25%

30. What is the minimum amount of handshakes that can occur among fifteen people in a meeting, if each person only shakes each other person's hand once?

select
105
select
250
select
210
select
32,760