GRE QUANT PRACTICE PAPER

1. If $x-pr=qpr$, and $x,p,q,r>0$, what is the value of x?

select
$x=qp-q$

select
$x=q+r$

select
$x=qp+p$

select
$x=pq+r$

select
$x=q+rp$

g(x) = 4x − 3

h(x) = .25πx + 5

2. If $f(x)=g(h(x))$. What is $f(1)$?

select
π + 17

select
19π − 3

select
4

select
13π + 3

select
42

3. Let S be the set of numbers that contains all of values of x such that $2x + 4 < 8$. Let T contain

all of the values of x such that -2x +3 < 8. What is the sum of all of the integer values that belong to the intersection of S and T?

select
-3

select
0

select
-2

select
-7

select
2

4.

Which of the following values of x satisfies the equation
$$\frac{x^3}{1-x^2} = \frac{x}{x^2-1}?$$

I. $x = 0$
II. $x = -1$
III. $x = 1$

select
II and III only

select
I, II, and III

select
III only

select
II only

select
I only

5. Let $f(x) = 2x^2 - 4x + 1$ and $g(x) = (x^2 + 16)^{(1/2)}$. If k is a negative number such that $f(k) = 31$,

then what is the value of $(f(g(k)))$?

<div>

[select]

31

[select]

-81

[select]

-35

[select]

5

[select]

25

</div>

6. Simplify $x_3x_5-x_2+(y_2)_2$.

[select]

x_6+y_4

[select]

$x_{15}-x_2+y_4$

[select]

$x_8-x_2+y_2$

[select]

$(xy)_2$

[select]

$x_8-x_2+y_4$

7. Solve for X.

$3x=19$

[select]

3

[select]

-2

[select]

12

-12

select

2

8. Simplify the following:

$$\frac{25^{44} - 5^{86}}{12}$$

select

45_2

select

$2 * 5^{23}$

select

$12*5_2$

select

$2 * 5^{86}$

select

$25_2 24$

9. A store sells 17 coffee mugs for $169. Some of the mugs are $12 each and some are $7 each. How many $7 coffee mugs were sold?

select

8

select

7

select

9

select

10

select

6

10. Choose the answer which best simplifies the expression below:

$2n_2 - n3a_2 - - n_2 b$

select

$2n_2b - nb - 3a_2n_23a_2b$

$2n_2b - nb + 3a_2n_23ab$

$2n_2b + nb + 3a_2n_23a_2b$

$2n_2b - nb + 3a_2n_23a_2b$

$-2n_2b - nb - 3a_2n_23a_2b$

11. Solve for X:

$$1x - -\sqrt{} = 4$$

± 116

116

4

14

16

12. Simplify the following expression: $60--\sqrt{} + 40--\sqrt{} + 10--\sqrt{}$

$215--\sqrt{} + 220--\sqrt{}$

25

$215--\sqrt{} + 310--\sqrt{}$

$525--\sqrt{}$

$415--\sqrt{}+55-\sqrt{}$

13. Convert 1.08 to a mixed number fraction. Then simplify your answer.

112

810

116100

1225

1810

14. What is 0.26 of 113?

0.002

0.02

2

0.0002

0.2

Quantity A: $15x+12y$

Quantity B: $15y+12xxy$

15. Which of the following is true?

The two quantities are equal.

select

Quantity B is larger.

select

Quantity A is larger.

select

The relationship between the two quantities cannot be determined.