GRE QUANT PRACTICE PAPER

1. Alice is twice as old as Tom, but four years ago, she was three years older than Tom is now. How old is Tom now?

```
      gelect

      7

      gelect

      21

      gelect

      9

      gelect

      3

      gelect
```

2. Worker *A* can make a trinket in 4 hours, Worker *B* can make a trinket in 2 hours. When they work together, how long will it take them to make a trinket?

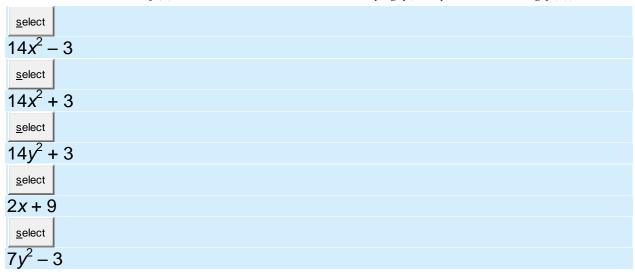
```
\frac{\text{select}}{1\frac{1}{3} \ hours}
\frac{\text{select}}{1\frac{1}{2} \ hours}
\frac{\text{select}}{1\frac{1}{2} \ hour}
\frac{1}{2} \ hour}
\frac{\text{select}}{1\frac{1}{2} \ hours}
\frac{\text{select}}{1\frac{1}{2} \ hours}
```

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
```



6. 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))?



7. 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?

<u>s</u> elect
500miles/hour
select
350miles/hour
select
450miles/hour
select
300miles/hour
<u>s</u> elect
400miles/hour
8. What is $f(-3)$ if $f(x) = x^2 + 5$?
<u>s</u> elect
4
<u>s</u> elect

<u>s</u> elect
14

```
<u>s</u>elect
15
 <u>s</u>elect
-14
9. If f(x)=3x+7 and g(x)=x_2-12, what is f(g(x))?
  select
3x_3 - 29
  <u>s</u>elect
9x3 + 29
  <u>s</u>elect
3x_2 - 29
  <u>s</u>elect
9x2-29
  <u>s</u>elect
3x2+29
10. A function f(x) = -1 for all values of x. Another function g(x) = 3x for all values of x. What
     is g(f(x)) when x = 4?
  select
12
  <u>s</u>elect
-3
  \underline{s}elect
-12
  \underline{s}elect
3
  \underline{s} \text{elect}
–1
```

11. If the average of two numbers is 3y and one of the numbers is y + z, what is the other number, in terms of y and z?

```
\frac{\mathsf{select}}{y+z}
```



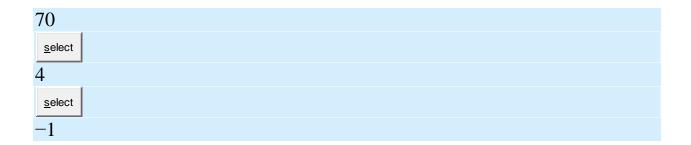
12. Given the functions f(x) = 2x + 4 and g(x) = 3x - 6, what is f(g(x)) when x = 6?

| Select | 144 | Select | 192 | Select | 12 | Select | 16 | Select | 28 |

$$f(x)=3x_2-5$$

$$g(x)=9-2x$$

13. Find f(g(5)).



14. What is the value of the function $f(x) = 6x^2 + 16x - 6$ when x = -3?

<u>s</u> elect	
96	
<u>s</u> elect	
-12	
<u>s</u> elect	
-108	
<u>s</u> elect	
0	