GRE QUANT PRACTICE PAPER

Quantity A: The slope of a line parallel to $4y+18x=13$

Quantity B: The slope of a line perpendicular to $6y-16x=15$

1. Which of the following is true?

select

The two quantities are equal.

select

The relationship between the quantities cannot be determined from the information provided.

select

Quantity B is larger.

select

Quantity A is larger.

2. What is the equation of a line passing through the two points $(41,11)$ and $(4,-9)$?

select

$y=2027x-1415$

select

$y=1714x-14825$

select

$y=2037x-41337$

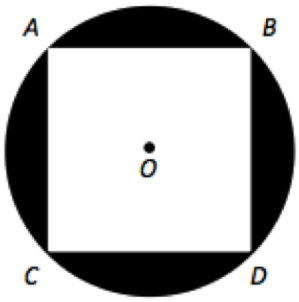
select

$y=14x-18$

select

$y=72x-853$

3. Given circle *O* with a diameter of 2 and square *ABCD* inscribed within circle *O*, what is the area of the shaded region?



select

2

select

π – 2

select

4

select

4π – 2

4. Quantity A: Double the measure of a single interior angle of an equilateral triangle.
Quantity B: The measure of a single interior angle of a hexagon.

select

The relationship cannot be determined with the information given.

select

Quantity B is bigger.

select

The quantities are equal.

select

Quantity A is bigger.

5. A rectangle has a length that is twice that of its height. If the perimeter of that rectangle is 20in, what is its area?

select

400in^2

select

1507in^2

select

2509in2

select

103in2

select

2009in2

6. A triangle has two sides with length a and one side length b. The length of side b= 14 yard. If the length of a= 2 the length of side b, what is the perimeter of the triangle?

select

14 yard

select

612 yard

select

712 yard

select

13 yard

select

54 yard

7. One side of an equilateral triangle is equal to 1
Quantity A: The area of the triangle.
Quantity B: 12

select

Quantity A is greater.

select

The relationship cannot be determined.

select

Quantity B is greater.

select

The two quantities are equal.

8. What is the length of the diagonal of a cube that has a surface area of $726\ in^2$?

select

$122\sqrt{}in$

select

22in

select

12in

select

11in

select

$113\sqrt{}in$

A right circular cylinder of volume 200π has a height of 8.

9. Quantity A: 10
   Quantity B: The circumference of the base

select

Quantity B is greater

select

The relationship cannot be determined from the information provided.

select

The two quantities are equal

select

Quantity A is greater

10. If a sphere has a volume of 268.08 cubic inches, what is the approximate radius of the sphere?

select

8in

select

4in

select

64in

select

4.5in

select

5.9in

11. If $w=18$ then which of the following is equal to w_{23}?

select

14

select

116

select

12

select

132

select

164

12. It takes no more than 40 minutes to run a race, but at least 30 minutes. What equation will model this in m minutes?

select

$|m+35|>5$

select

$|m-35|<5$

select

$|m+35|<5$

select

$|m-35|>5$

select

$|m-35|=5$

13. Solve the inequality $6(x-1)<7(3-x)$.

select

x>1327

select

x<2713

select

x<127

select

x>−1327

select

x>−1117

14. Simplify: $(x^3 * 2x^4 * 5y + 4y^2 + 3y^2)/y$

select

$10x^7 + 7y^3$

select

None of the other answers

select

$10x^7y + 7y^2$

select

$10x^{11} + 7y^3$

select

$10x^7 + 7y$

15. Solve for x.

$14_x=256$

select

256

select

4

select

−14

select

14

select

−4

16. If one mile is equal to 5,280 feet, how many feet are 100 miles equal to in scientific notation?

select

5280×10^2

select

$.528\times10^6$

select

528,000

select

5.28×10^5

select

528×10^3

17. If a cash deposit account is opened with $\$7500$ for a three year period at 3.5% interest compounded once annually, which of the following is closest to the positive difference between the interest accrued in the third year and the interest accrued in the second year?

select

$281.2

select

$81.41

select

$9.51

select

$0

select

$11.41

18. Let x and y be integers such that $0\leq x\leq5$ and $-4\leq y\leq-1$.

Quantity A	Quantity B
$x-\lvert y\rvert$	0

select

Quantity B is greater

select

Quantity A and Quantity B are equal

select

The relationship cannot be determined from the information given

select

Quantity A is greater

19. Choose the answer which best simplifies the following expression:
$2p^2+3p2a-5p3$

select

$15p-10pa6a$

select

$6p+9p-10pa6a$

select

$6p^2+9p-10p6$

select

$6p^2+9p+10pa6a$

select

$6p^2+9p-10pa6a$

20. Simplify the following:
$40--\sqrt{}+20--\sqrt{}+160---\sqrt{}$

select

$5-\sqrt{}(5+22-\sqrt{})$

select

The expression cannot be simplified any further.

select

$810--\sqrt{}$

select

$10--\sqrt{}(6+2-\sqrt{})$

select

$420--\sqrt{}$