

GRE QUANT PRACTICE PAPER

1. If the average of a and b is 70, and the average of b and c is 110, what is the value of $c-a$?

90

40

150

70

80

2. There is a line defined by two end-points, $(11, -5)$ and (a, b) . The midpoint between these two points is $(-6, -21)$. What is the value of the point (a, b) ?

$(4, -194)$

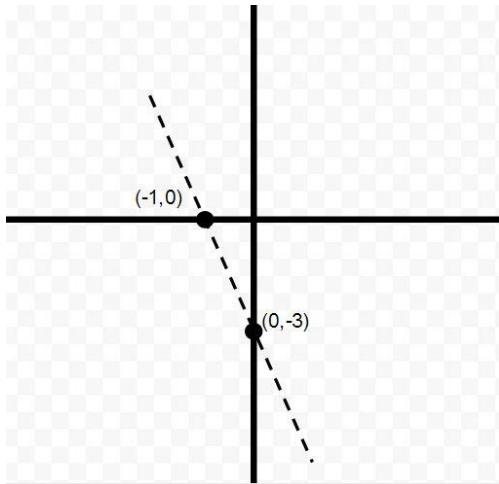
$(12, -14)$

$(-14, -25)$

$(-23, -37)$

$(5, -26)$

Refer to the following graph:



3. What is the slope of the line shown?

-3

1/3

3

-1/3

-1

Quantity A: The slope of the line parallel to $5x=15y-12$

Quantity B: The slope of the line parallel to $2y=-23x-14$

4. Which of the following is true?

Quantity A is larger.

The two quantities are equal.

The relationship between the quantities cannot be determined for the information given.

Quantity B is larger.

5. If m is a line that has a y -intercept of 3 and an x -intercept of 7, which of the following is the equation of a line that is perpendicular to m ?

$y = (3x + 11)7$

$y = (7x + 15)3$

$y = x + 73$

$y = (-3x - 24)7$

$y = (7 - 7x)3$

Quantity A: The diameter of a circle with area of 109π

Quantity B: The diameter of a circle with circumference of 22π

6. Which of the following is true?

Quantity B is larger.

The relationship between the quantities cannot be determined.

Quantity A is larger.

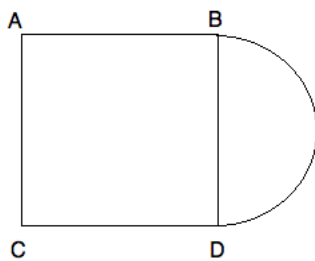
The two quantities are equal.

7. Which point could lie on the circle with radius 5 and center (1,2)?

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(4,6)	
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(3,4)	
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(3,-2)	
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(-3, 6)	
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(4,-1)	

8. If rectangle $ABCD$ has a perimeter of 68, and the longer edge is 2.4 times longer than the shorter edge, then how long is the diagonal AC ?

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26	
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32	
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30	
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24	
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13	



9. The diagram above represents a square $ABCD$ with a semi-circle directly attached to its side.

If the area of the figure is $16 + 2\pi$, what is its outer perimeter?

16

None of the other answers

$12 + 2\pi$

$16 + 2\pi$

20π

10. An acute Isosceles triangle has two sides with length **a** and one side length **b**. The length of side **a** = 39 ft. If the length of **b** = half the length of side **a**, what is the perimeter of the triangle?

1 foot

46 foot

26 foot

10 inches

6 inches

Quantitative Comparison

11. Quantity A: the area of a right triangle with sides 10, 24, 26

Quantity B: twice the area of a right triangle with sides 5, 12, 13

Quantity A is greater.

The relationship cannot be determined from the information given.

Quantity B is greater.

The two quantities are equal.

12. What is the length of an edge of a cube with a surface area of 1350in^2 ?

225in

15in

25in

305in

85in

Quantitative Comparison

13. Quantity A: The volume of a cylinder with a radius of 3 and a height of 4

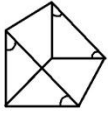
Quantity B: 3 times the volume of a cone with a radius of 3 and a height of 4

The relationship cannot be determined from the information given.

The two quantities are equal.

Quantity B is greater.

Quantity A is greater.



This triangular prism has a height of 3 feet and a length of 7 feet.

14. What is the surface area of the prism? Round to the nearest tenth.

90ft²

80.7ft²

80ft²

81ft²

15. How much does the volume of a sphere increase if its radius is increased by 50%?

237.5%

50%

337.5%

150%

0.3375%