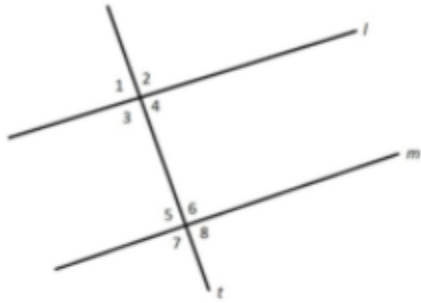


## GMAT Geometry Practice Paper 5

### Question 1



Note: Figure NOT drawn to scale. Do *not* assume lines are parallel or perpendicular simply by appearance.

Evaluate  $m\angle 1$ .

Statement 1:  $m\angle 4 = 88^\circ$

Statement 2:  $m\angle 8 = 88^\circ$

Possible Answers:

EITHER statement ALONE is sufficient to answer the question.

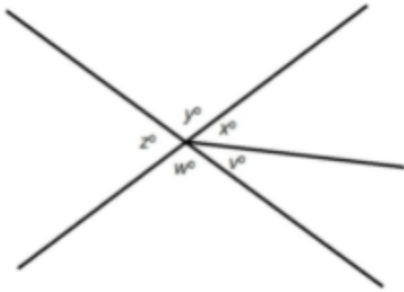
Statement 2 ALONE is sufficient to answer the question, but Statement 1 ALONE is NOT sufficient to answer the question.

Statement 1 ALONE is sufficient to answer the question, but Statement 2 ALONE is NOT sufficient to answer the question.

BOTH statements TOGETHER are sufficient to answer the question, but NEITHER statement ALONE is sufficient to answer the question.

BOTH statements TOGETHER are insufficient to answer the question.

### Question 2



Note: Figure NOT drawn to scale.

Refer to the above diagram. Evaluate  $y$ .

Statement 1:  $x + v = 74$

Statement 2:  $z + y + x + v = 254$

Possible Answers:

Statement 1 ALONE is sufficient to answer the question, but Statement 2 ALONE is NOT sufficient to answer the question.

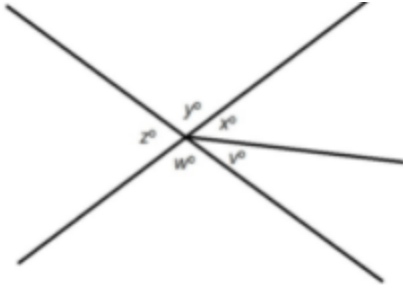
EITHER statement ALONE is sufficient to answer the question.

BOTH statements TOGETHER are insufficient to answer the question.

Statement 2 ALONE is sufficient to answer the question, but Statement 1 ALONE is NOT sufficient to answer the question.

BOTH statements TOGETHER are sufficient to answer the question, but NEITHER statement ALONE is sufficient to answer the question.

### Question 3



Note: Figure NOT drawn to scale.

Refer to the above diagram. Evaluate  $x$ .

Statement 1:  $x + y = w + v$

Statement 2:  $z = 2x$

Possible Answers:

EITHER statement ALONE is sufficient to answer the question.

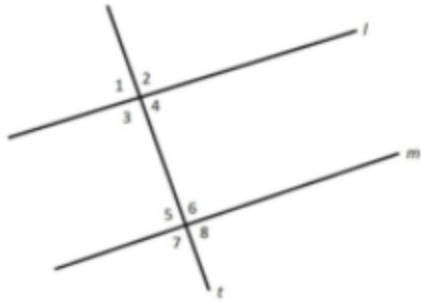
Statement 1 ALONE is sufficient to answer the question, but Statement 2 ALONE is NOT sufficient to answer the question.

BOTH statements TOGETHER are sufficient to answer the question, but NEITHER statement ALONE is sufficient to answer the question.

BOTH statements TOGETHER are insufficient to answer the question.

Statement 2 ALONE is sufficient to answer the question, but Statement 1 ALONE is NOT sufficient to answer the question.

## Question 4



Note: Figure NOT drawn to scale. Do *not* assume lines are parallel or perpendicular simply by appearance.

Evaluate  $m\angle 1$ .

Statement 1:  $l \parallel m$

Statement 2:  $t \perp m$

Possible Answers:

BOTH statements TOGETHER are sufficient to answer the question, but NEITHER statement ALONE is sufficient to answer the question.

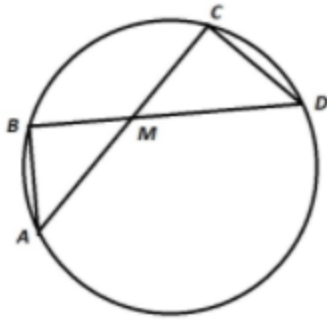
EITHER statement ALONE is sufficient to answer the question.

BOTH statements TOGETHER are insufficient to answer the question.

Statement 2 ALONE is sufficient to answer the question, but Statement 1 ALONE is NOT sufficient to answer the question.

Statement 1 ALONE is sufficient to answer the question, but Statement 2 ALONE is NOT sufficient to answer the question.

## Question 5



Note: Figure NOT drawn to scale.

Give the measure of  $\angle CMD$  in the above diagram.

Statement 1:  $\widehat{AB}$  is an arc of measure  $30^\circ$ .

Statement 2:  $\widehat{CD}$  is an arc of measure  $44^\circ$ .

Possible Answers:

Statement 1 ALONE is sufficient to answer the question, but Statement 2 ALONE is NOT sufficient to answer the question.

BOTH statements TOGETHER are insufficient to answer the question.

Statement 2 ALONE is sufficient to answer the question, but Statement 1 ALONE is NOT sufficient to answer the question.

EITHER statement ALONE is sufficient to answer the question.

BOTH statements TOGETHER are sufficient to answer the question, but NEITHER statement ALONE is sufficient to answer the question.

## Question 6

Find the length of the diagonal of square G.

I) The area of G is 169 fathoms squared.

II) The side length of G is 13 fathoms.

Possible Answers:

Statement 2 is sufficient to solve the question, but statement 1 is not sufficient to solve the question.

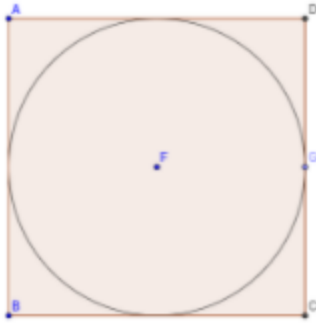
Each statement alone is enough to solve the question.

Both statements taken together are sufficient to solve the problem.

Statement 1 is sufficient to solve the question, but statement 2 is not sufficient to solve the question.

Neither statement is sufficient to solve the question. More information is needed.

## Question 7



The circle with center  $F$  is inscribed in square  $ABCD$ . What is the length of diagonal  $AC$ ?

(1) The area of the circle is  $16\pi$ .

(2) The side of the square is 8.

Possible Answers:

Statement 2 alone is sufficient.

Both statements together are sufficient.

Each statement alone is sufficient.

Statement 1 alone is sufficient.

Statements 1 and 2 together are not sufficient.

## Question 8

On your college campus there is a square grassy area where people like to hangout and enjoy the sun. While walking with some friends, you decide to take the shortest distance to the corner of the square opposite from where you are. Find the distance you traveled.

- I) The perimeter of the square is 60 meters.
- II) The square covers an area of 225 square meters.

Possible Answers:

Both statements are needed to answer the question.

Statement II is sufficient to answer the question, but statement I is not sufficient to answer the question.

Either statement is sufficient to answer the question.

Neither statement is sufficient to answer the question. More information is needed.

Statement I is sufficient to answer the question, but statement II is not sufficient to answer the question.

## Question 9

Find the length of the diagonal of square A if the diagonal of square B is  $8\sqrt{2}in$ .

- 1. The perimeter of square B is  $32in$
- 2. The area of square A is  $16in^2$

Possible Answers:

Statement 2 alone is sufficient, but statement 1 alone is not sufficient to answer the question.

Each statement alone is sufficient to answer the question.

Statements 1 and 2 are not sufficient, and additional data is needed to answer the question.

Statement 1 alone is sufficient, but statement 2 alone is not sufficient to answer the question.

Both statements taken together are sufficient to answer the question, but neither statement alone is sufficient.

## Question 10



What is the length of the diagonal of the square?

1. The area of the square is  $64\text{cm}^2$ .
2. The perimeter is  $32\text{cm}$ .

Possible Answers:

Both statements taken together are sufficient to answer the question, but neither statement alone is sufficient.

Statement 2 alone is sufficient, but statement 1 alone is not sufficient to answer the question.

Each statement alone is sufficient to answer the question.

Statements 1 and 2 are not sufficient, and additional data is needed to answer the question.

Statement 1 alone is sufficient, but statement 2 alone is not sufficient to answer the question.

## Question 11

The diagonal bracing of a square pallet measures  $6\text{ m}$ . What is the area of the pallet?

Possible Answers:

$32\text{ m}^2$

$24\text{ m}^2$

$3\sqrt{2}\text{ m}^2$

$18\text{ m}^2$

$\frac{9}{\sqrt{2}}\text{ m}^2$

## Question 12

Is Rectangle  $RECT$  a square?

Statement 1:  $\overline{RC} \perp \overline{ET}$

Statement 2:  $\overline{RE} \cong \overline{EC}$

Possible Answers:

Statement 1 ALONE is sufficient to answer the question, but Statement 2 ALONE is NOT sufficient to answer the question.

EITHER statement ALONE is sufficient to answer the question.

Statement 2 ALONE is sufficient to answer the question, but Statement 1 ALONE is NOT sufficient to answer the question.

BOTH statements TOGETHER are sufficient to answer the question, but NEITHER statement ALONE is sufficient to answer the question.

BOTH statements TOGETHER are insufficient to answer the question.

## Question 13

Find the side length of square R.

I) The area of square R is  $225\text{yd}^2$ .

II) The perimeter of square R is  $60\text{yd}$ .

Possible Answers:

Statement 1 is sufficient to solve the question, but statement 2 is not sufficient to solve the question.

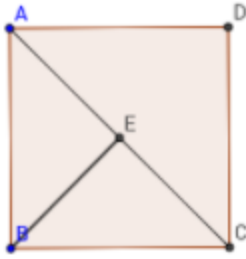
Neither statement is sufficient to solve the question. More information is needed.

Statement 2 is sufficient to solve the question, but statement 1 is not sufficient to solve the question.

Both statements taken together are sufficient to solve the question.

Each statement alone is enough to solve the question.

## Question 14



What is the length of the side of square  $ABCD$ , knowing that  $E$  is the midpoint of diagonal  $\overline{AC}$ ?

(1)  $BE = \sqrt{2}$

(2)  $\angle EBC = 45^\circ$

Possible Answers:

Statements 1 and 2 together are not sufficient

Statement 1 alone is sufficient

Both statements together are sufficient

Statement 2 alone is sufficient

Each statement alone is sufficient

## Question 15

Find the area of square  $TGIF$ .

I)  $TGIF$  has a diagonal of  $5\sqrt{2}$  inches.

II)  $TGIF$  has a perimeter of 20 inches.

Possible Answers:

Statement I is sufficient to answer the question, but Statement II is not sufficient to answer the question.

Both statements together are needed to answer the question.

Either statement alone is sufficient to answer the question.

Statement II is sufficient to answer the question, but Statement I is not sufficient to answer the question.

Neither statement is sufficient to answer the question. More information is needed.

## Question 16

Calculate the length of the square.

Statement 1): The area is 1.

Statement 2): The diagonal is 1.

Possible Answers:

Statement 1) ALONE is sufficient, but Statement 2) ALONE is not sufficient to answer the question.

Statement 2) ALONE is sufficient, but Statement 1) ALONE is not sufficient to answer the question.

BOTH statements taken TOGETHER are sufficient to answer the question, but neither statement ALONE is sufficient.

EACH statement ALONE is sufficient.

BOTH statements TOGETHER are NOT sufficient, and additional data is needed to answer the question.

## Question 17

Find the length of the quadrilateral.

Statement 1.) The area of a quadrilateral is 4.

Statement 2.) All interior angles of a quadrilateral are right angles.

Possible Answers:

BOTH statements taken TOGETHER are sufficient to answer the question, but neither statement ALONE is sufficient.

Statement 1) ALONE is sufficient, but Statement 2) ALONE is not sufficient to answer the question.

BOTH statements TOGETHER are NOT sufficient, and additional data is needed to answer the question.

Statement 2) ALONE is sufficient, but Statement 1) ALONE is not sufficient to answer the question.

EACH statement ALONE is sufficient.

## Question 18

Data sufficiency question- do not actually solve the question

Find the area of a square.

1. The length of one side of the square is 4.

2. The length of the diagonal of the square is 12.

Possible Answers:

Statements 1 and 2 together are not sufficient, and additional data is needed to answer the question

Statement 2 alone is sufficient, but statement 1 alone is not sufficient to answer the question

Statement 1 alone is sufficient, but statement 2 alone is not sufficient to answer the question

Both statements taken together are sufficient to answer the question, but neither statement alone is sufficient

Each statement alone is sufficient

## Question 19

A circle is inscribed inside Square  $SQURSQUR$ . The circle intersects the square at points  $A, B, C,$  and  $D$ . Give the area of the square.

Statement 1: The circle has area  $144\pi$ .

Statement 2: Arc  $\widehat{AB}$  has length  $6\pi$ .

Possible Answers:

Statement 2 ALONE is sufficient to answer the question, but Statement 1 ALONE is NOT sufficient to answer the question.

BOTH statements TOGETHER are sufficient to answer the question, but NEITHER statement ALONE is sufficient to answer the question.

Statement 1 ALONE is sufficient to answer the question, but Statement 2 ALONE is NOT sufficient to answer the question.

BOTH statements TOGETHER are insufficient to answer the question.

EITHER statement ALONE is sufficient to answer the question.

## Question 20

A circle is inscribed inside Square  $SQURSQUR$ . The circle intersects the square at points  $A, B, C,$  and  $D$ . Give the area of the square.

Statement 1: The circle has circumference  $100\pi$ .

Statement 2:  $\widehat{AB}$  is a  $90^\circ$  arc.

Possible Answers:

EITHER statement ALONE is sufficient to answer the question.

BOTH statements TOGETHER are sufficient to answer the question, but NEITHER statement ALONE is sufficient to answer the question.

Statement 1 ALONE is sufficient to answer the question, but Statement 2 ALONE is NOT sufficient to answer the question.

BOTH statements TOGETHER are insufficient to answer the question.

Statement 2 ALONE is sufficient to answer the question, but Statement 1 ALONE is NOT sufficient to answer the question.