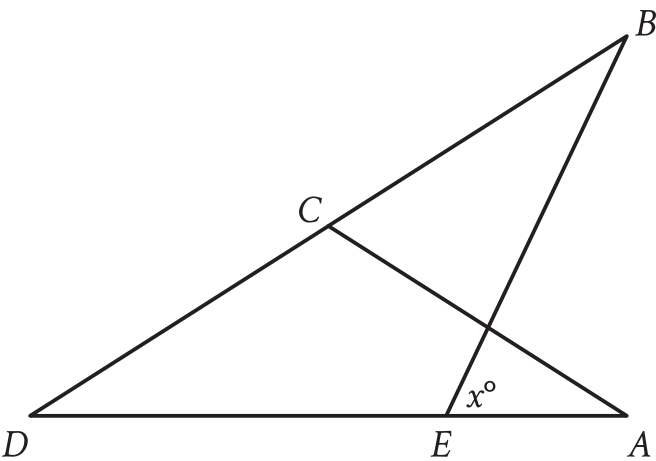


Question ID 6d99b141

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■ ■ ■

ID: 6d99b141



Note: Figure not drawn to scale.

In the figure,  $AC = CD$ . The measure of angle  $EBC$  is  $45^\circ$ , and the measure of angle  $ACD$  is  $104^\circ$ . What is the value of  $x$ ?

# Question ID 9912e19f

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: 9912e19f

Triangles  $EFG$  and  $JKL$  are congruent, where  $E$ ,  $F$ , and  $G$  correspond to  $J$ ,  $K$ , and  $L$ , respectively. The measure of angle  $E$  is  $45^\circ$  and the measure of angle  $F$  is  $20^\circ$ . What is the measure of angle  $J$ ?

- A.  $20^\circ$
- B.  $45^\circ$
- C.  $135^\circ$
- D.  $160^\circ$

# Question ID 4b7bb316

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Area and volume	<div><div></div><div></div><div></div></div>

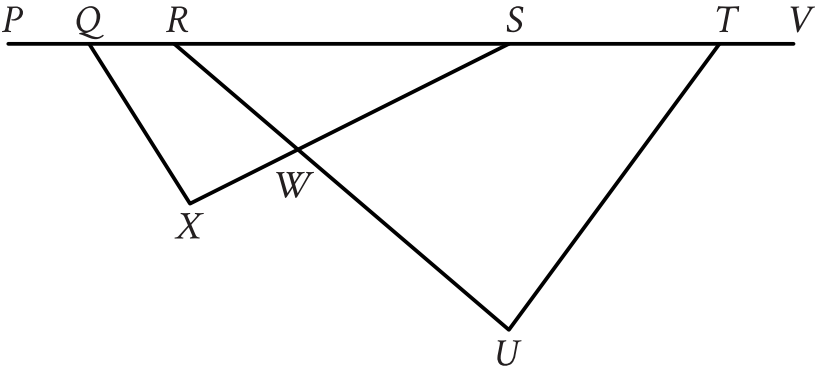
ID: 4b7bb316

The length of each edge of a box is **29** inches. Each side of the box is in the shape of a square. The box does not have a lid. What is the exterior surface area, in square inches, of this box without a lid?

Question ID e10d8313

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■ ■ ■

ID: e10d8313



Note: Figure not drawn to scale.

In the figure shown, points  $Q$ ,  $R$ ,  $S$ , and  $T$  lie on line segment  $PV$ , and line segment  $RU$  intersects line segment  $SX$  at point  $W$ . The measure of  $\angle SQX$  is  $48^\circ$ , the measure of  $\angle SXQ$  is  $86^\circ$ , the measure of  $\angle SWU$  is  $85^\circ$ , and the measure of  $\angle VTU$  is  $162^\circ$ . What is the measure, in degrees, of  $\angle TUR$ ?

# Question ID bcb66188

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Right triangles and trigonometry	<div><div></div><div></div><div></div></div>

ID: bcb66188

Triangle  $FGH$  is similar to triangle  $JKL$ , where angle  $F$  corresponds to angle  $J$  and angles  $G$  and  $K$  are right angles. If  $\sin(F) = \frac{308}{317}$ , what is the value of  $\sin(J)$ ?

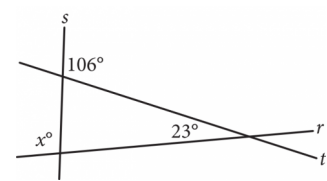
- A.  $\frac{75}{317}$
- B.  $\frac{308}{317}$
- C.  $\frac{317}{308}$
- D.  $\frac{317}{75}$

# Question ID f88f27e5

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■ ■ ■

ID: f88f27e5

Intersecting lines  $r$ ,  $s$ , and  $t$  are shown below.

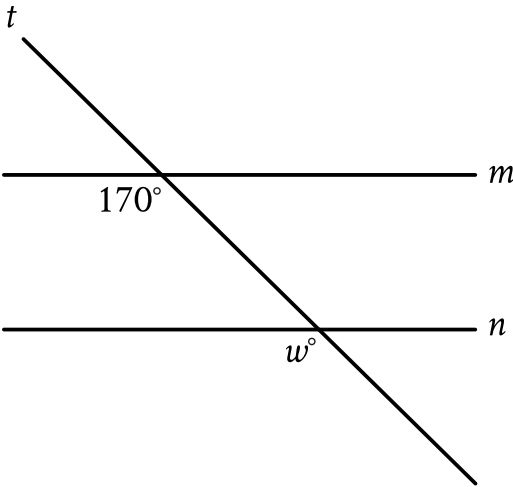


What is the value of  $x$  ?

Question ID 5207e508

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: 5207e508



Note: Figure not drawn to scale.  
In the figure, line  $m$  is parallel to line  $n$ . What is the value of  $w$ ?

- A. 17
- B. 30
- C. 70
- D. 170

# Question ID f67e4efc

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Area and volume	<div><div></div><div></div><div></div></div>

ID: f67e4efc

A right circular cylinder has a volume of  $45\pi$ . If the height of the cylinder is 5, what is the radius of the cylinder?

- A. 3
- B. 4.5
- C. 9
- D. 40



# Question ID e5c57163

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Area and volume	<div><div></div><div></div><div></div></div>

ID: e5c57163

Square A has side lengths that are **166** times the side lengths of square B. The area of square A is ***k*** times the area of square B. What is the value of ***k***?