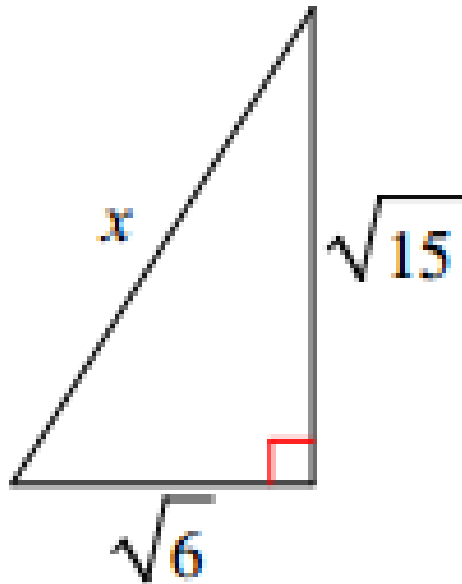


$$8 < x < 12$$

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Find the value of  $x$ . Leave your answer in simplest radical form.



$$\sqrt{21}$$

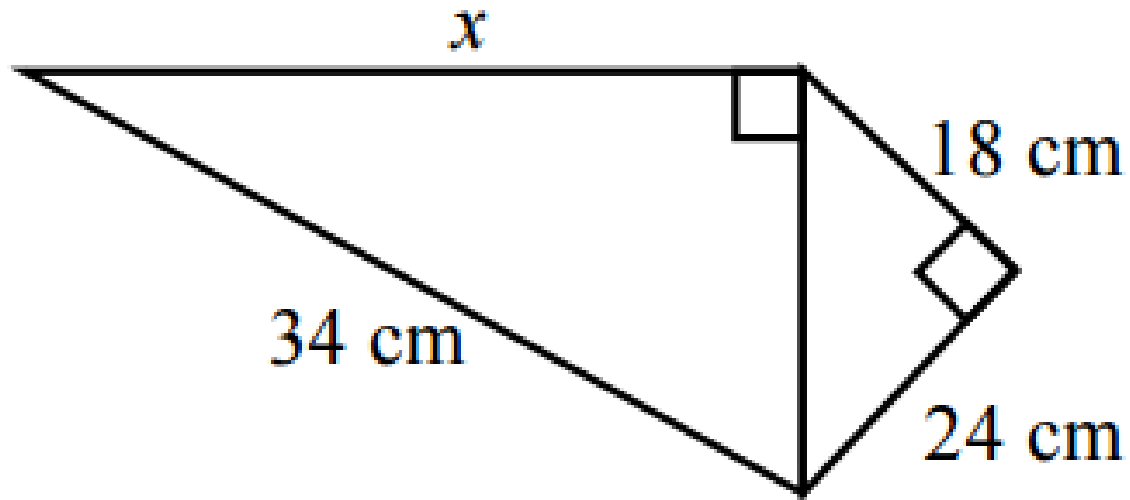
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Two poles are 40 feet high and 46 feet high. They are 9 feet apart. How long is a wire stretched from the top of the 40-foot pole to the top of the 46-foot pole? Round to the nearest tenth of a foot.

# 10.8

---

Find the value of  $x$ .



# 16

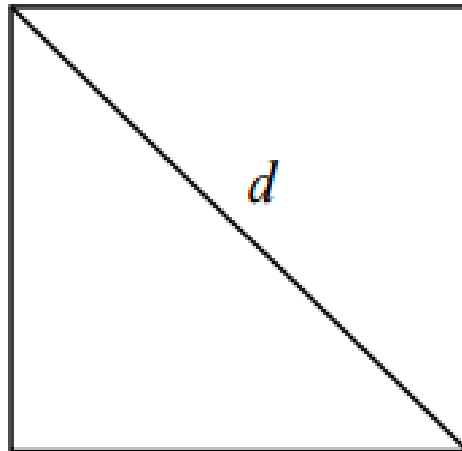
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Two cars leave point A at 2pm. Car A drives north at 45 mph and car B drives east at 60 mph. How far apart are the two cars at 4pm?

# 150

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The area of the square is  $144 \text{ cm}^2$ .  
What is the length of the diagonal  $d$ ?



$$12\sqrt{2}$$

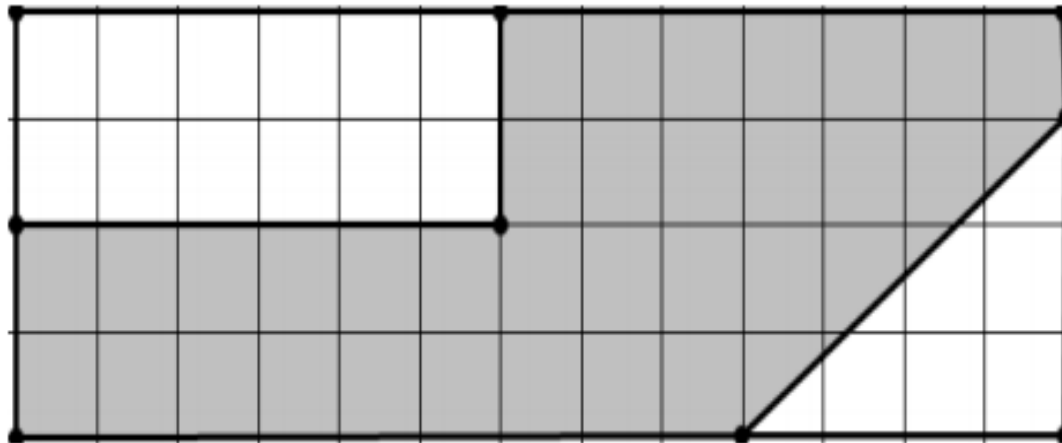
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What is the area of an equilateral triangle whose sides measure 26 yards? Write your answer in simplest radical form.

# $169\sqrt{3}$

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Calculate the perimeter of the shaded figure below.



# 32

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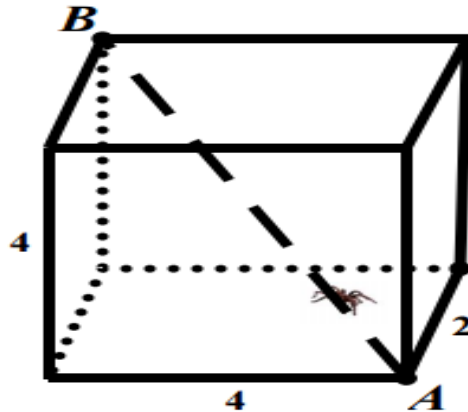
On a treasure hunt, Kenny and Jordan walk away from each other at what appears to be a right angle. Jordan is walking at 2 km/hr and Kenny is walking at 3 km/hr. After 1 hour, Kenny stops walking. After 3 hours, Jordan stops. If they are 7 km away from each other after they both have stopped, did they walk away from each other at a right angle?



# No

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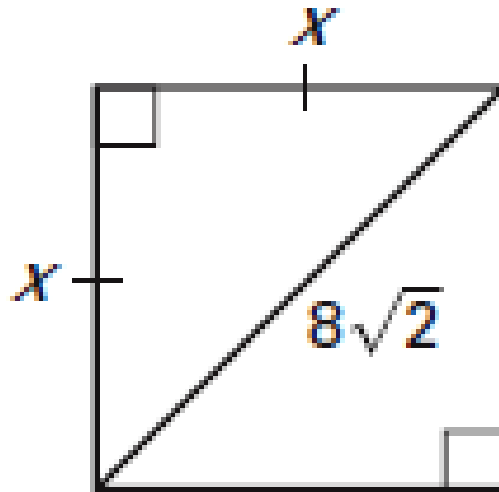
A spider has taken up residence in a small box which measures 2 inches by 4 inches by 4 inches. What is the length, in inches, of a straight spider web that will carry the spider from the lower right front corner to the upper left back corner of the box?



# 6

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Please find the value of  $x$ .



# 8

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The sides of a triangle have lengths  $x$ ,  $x+4$  and  $20$ . If the length of the longest side is  $20$ , what value(s) of  $x$  make the triangle acute?