

Practicing Segment and Angle Relationships

Solve each equation.

1) $-100 = -4(1 - 3x)$

2) $-99 = -6(n + 8) - 3$

3) $98 = 2(6x + 6) + 2$

4) $112 = -3(1 - 7n) + 2n$

Simplify.

5) $\sqrt{1000}$

6) $\sqrt{810}$

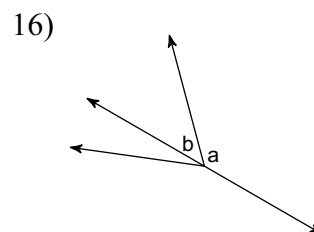
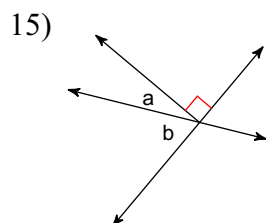
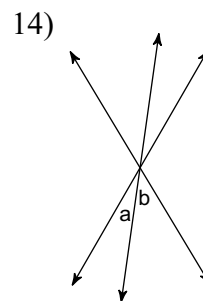
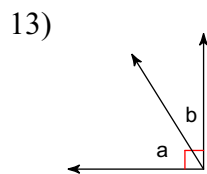
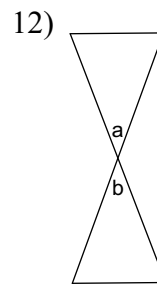
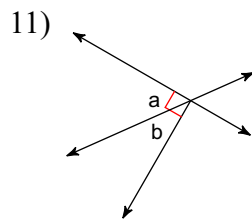
7) $\sqrt{700}$

8) $\sqrt{32}$

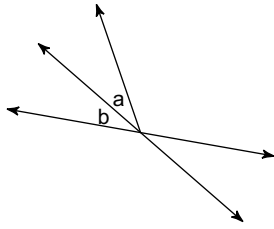
9) $\sqrt{360}$

10) $\sqrt{441}$

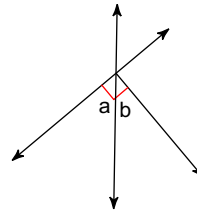
Name the relationship: complementary, linear pair, vertical, or adjacent.



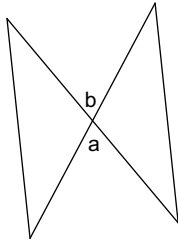
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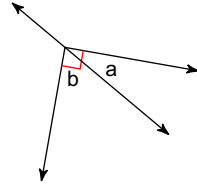
18)



19)

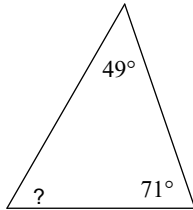


20)

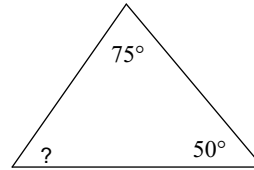


Find the measure of each angle indicated.

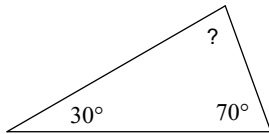
21)



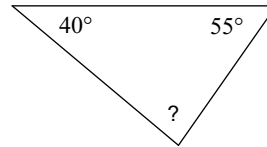
22)



23)

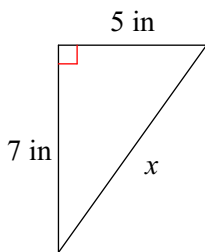


24)

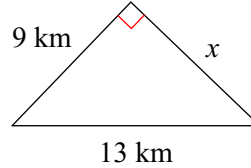


Find the missing side of each triangle. Leave your answers in simplest radical form.

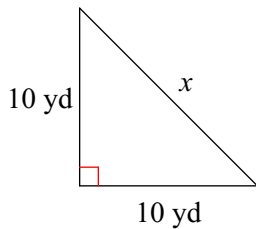
25)



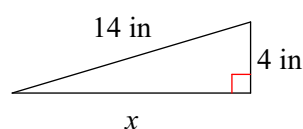
26)



27)



28)



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Solve each equation.

1) $-100 = -4(1 - 3x)$
{-8}

2) $-99 = -6(n + 8) - 3$
{8}

3) $98 = 2(6x + 6) + 2$
{7}

4) $112 = -3(1 - 7n) + 2n$
{5}

Simplify.

5) $\sqrt{1000}$
 $10\sqrt{10}$

6) $\sqrt{810}$
 $9\sqrt{10}$

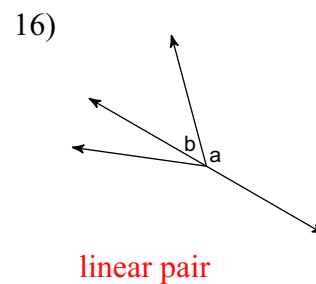
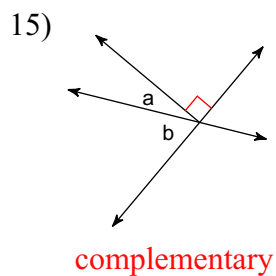
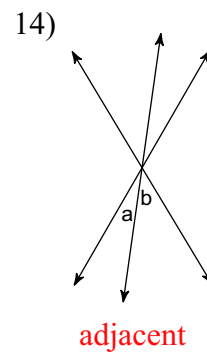
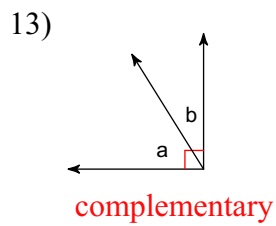
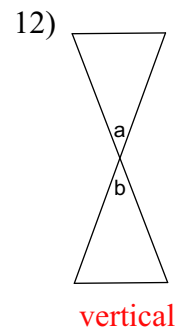
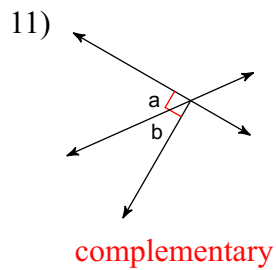
7) $\sqrt{700}$
 $10\sqrt{7}$

8) $\sqrt{32}$
 $4\sqrt{2}$

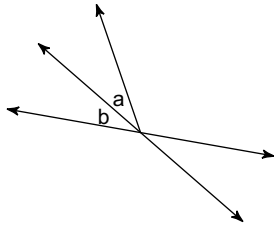
9) $\sqrt{360}$
 $6\sqrt{10}$

10) $\sqrt{441}$
21

Name the relationship: complementary, linear pair, vertical, or adjacent.

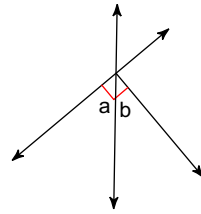


17)



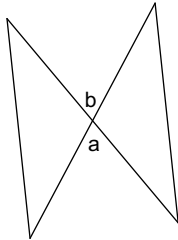
adjacent

18)



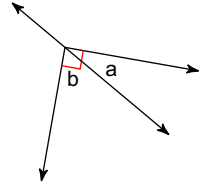
complementary

19)



vertical

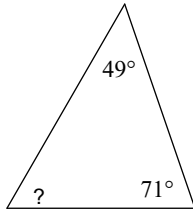
20)



complementary

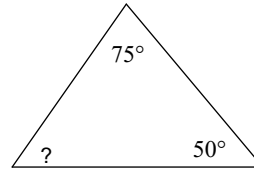
Find the measure of each angle indicated.

21)



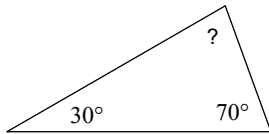
60°

22)



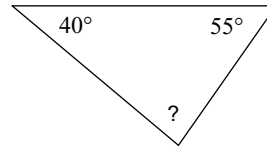
55°

23)



80°

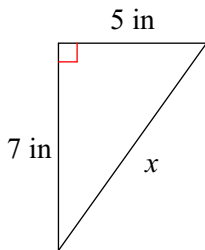
24)



85°

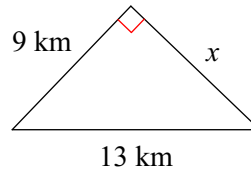
Find the missing side of each triangle. Leave your answers in simplest radical form.

25)



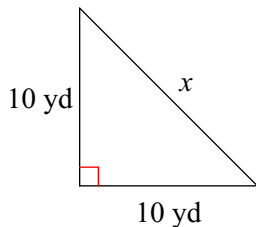
$\sqrt{74}$ in

26)



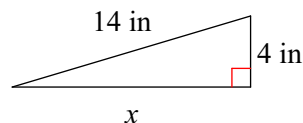
$2\sqrt{22}$ km

27)



$10\sqrt{2}$ yd

28)



$6\sqrt{5}$ in