

Score: 1 of 1 pt

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✓ 7.1.7

Determine the number of triangles that can be drawn with the given data.

$$a = 40, b = 73, A = 25^\circ$$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

- ☒ A. The number of triangles that can be drawn with given measurements are .
(Type a whole number.)
- ☐ B. No triangle can be drawn with the given measurements.

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✓ 7.1.17

Given $B = 30^\circ$, $C = 90^\circ$, and $a = 12$, find the exact value of b in triangle ABC.

$b = 4\sqrt{3}$ (Type an exact answer, using radicals as needed.)

Score: 1 of 1 pt

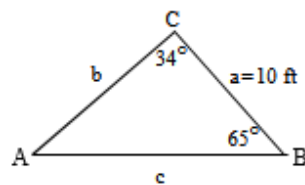
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Test Score

✓ 7.1.21

Solve the triangle shown to the right.

 $A = 81^\circ$ (Type an integer or a decimal.) $b \approx 9.18$ ft

(Do not round until the final answer. Then round to the nearest hundredth as needed.)

 $c \approx 5.66$ ft

(Do not round until the final answer. Then round to the nearest hundredth as needed.)

Score: 1 of 1 pt

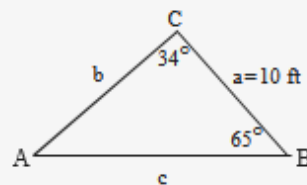
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Test Score

✓ 7.1.21

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Score: 0 of 1 pt

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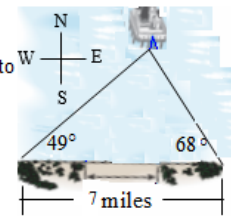
Test Score: 88.33%, 17.67 of 20 pts



7.1.61



During a war, Country A led a massive assault on the beach of Country B. The beach is 7 miles long. At 5 AM, a ship was first spotted from either end of the beach. The angle made with the ship from one end of the beach was 49° . The angle made with the ship from the other end of the beach was 68° . Determine the distance from the ship to the west end of the beach at the moment the ship was first spotted.



The ship was about 7.3 miles from the west end when it was first spotted.
(Round to one decimal place as needed.)

I just calculated from the wrong end.

Score: 1 of 1 pt

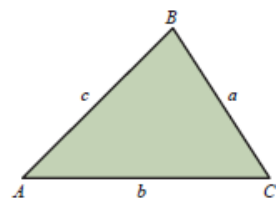
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Test Score: 88.33%, 1

✓ 7.2.1

Complete the following statement.

One form of law of cosines is $c^2 = a^2 + b^2 - 2ab \cos$ (___)



One form of law of cosines is $c^2 = a^2 + b^2 - 2ab \cos$ (C).

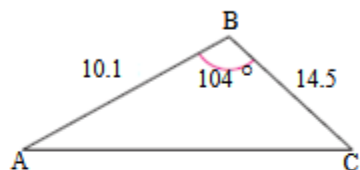
Score: 1 of 1 pt

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Test

✓ 7.2.15

Solve the triangle ABC.



Find the unknown side b, the side opposite angle B.

b = 19.6 (Round to the nearest tenth as needed.)

Find the unknown angle C.

C = 30 (Round to the nearest tenth as needed.)

Find the unknown angle A.

A = 46 (Round to the nearest tenth as needed.)

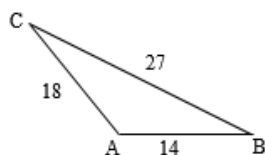
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Test Score: 88.33%, 1

✓ 7.2.17

Solve the triangle given to the right.



$$A = 114.5^\circ, B = 37.3^\circ, C = 28.2^\circ$$

(Round the final answers to one decimal place as needed. Round all intermediate values to four decimal places as needed.)

Score: 0.67 of 1 pt

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Test

✗ 7.2.19

Solve the triangle.

$$b=2, c=5, A=150^\circ$$

$$a \approx 6.81 \text{ (Round to the nearest hundredth as needed.)}$$

$$B \approx 8.5^\circ \text{ (Round to the nearest tenth as needed.)}$$

$$C \approx 21.5^\circ \text{ (Round to the nearest tenth as needed.)}$$

They wanted it rounded to the hundredth, not TENTHS place. I put 6.8.

LAME!

Score: 1 of 1 pt



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✓ 7.3.19

Find the area of the triangle ABC.

$$A = 47.3^\circ \quad B = 38.5^\circ \quad c = 28.1 \text{ m}$$

What is the area of the triangle?

181.1 m² (Round to the nearest tenth as needed.)

Score: 1 of 1 pt



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✓ 7.4.15

The vector \mathbf{v} has initial point P and terminal point Q. Write \mathbf{v} as a position vector.

P(5,6), Q(2,7)

$$\mathbf{v} = \langle -3, 1 \rangle$$

(Simplify your answer. Use integers or fractions for any numbers in the expression.)

Score: 1 of 1 pt

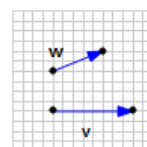
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Test Score: 88.33%, 17.67 of 20 p

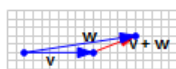
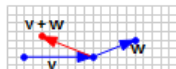
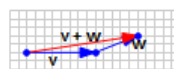
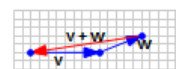
7.4.7

Use the vectors in the figure at the right to graph the following vector.

$v + w$



Choose the correct graph below.

☐ A.☐ B.☒ C.☐ D.

Score: 1 of 1 pt

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7.4.41

Let $\mathbf{u} = 8\mathbf{i} - 5\mathbf{j}$ and $\mathbf{v} = -9\mathbf{i} + 7\mathbf{j}$. Find the vector $\mathbf{u} + \mathbf{v}$. $\mathbf{u} + \mathbf{v} = -1\mathbf{i} + 2\mathbf{j}$ (Simplify your answer. Type your answer in terms of \mathbf{i} and \mathbf{j} .)

Score: 1 of 1 pt

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7.5.19

Find $\mathbf{u} \cdot \mathbf{v}$, where θ is the angle between the vectors \mathbf{u} and \mathbf{v} .

$\|\mathbf{u}\| = 5, \|\mathbf{v}\| = 8, \theta = 60^\circ$

 $\mathbf{u} \cdot \mathbf{v} \approx 20$ (Round to the nearest tenth as needed.)

Score: 1 of 1 pt



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7.5.39

Use the dot product to determine whether \mathbf{v} and \mathbf{w} are orthogonal.

$$\mathbf{v} = \mathbf{i} + \mathbf{j}, \mathbf{w} = -\mathbf{i} + \mathbf{j}$$

Are vectors \mathbf{v} and \mathbf{w} orthogonal?



No



Yes

Score: 1 of 1 pt



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Test Score: 88.33%, 17.67 of 20 pts



7.6.29

The polar coordinates of a point are given. Find the rectangular coordinates of this point.

$$\left(-5, -\frac{\pi}{3}\right)$$

What are the rectangular coordinates of this point?

$$\left(-\frac{5}{2}, \frac{5\sqrt{3}}{2}\right)$$

(Type an ordered pair. Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression.)

Score: 1 of 1 pt



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Test Score: 88.33%, 17.67 of 20 pts



7.6.35



The rectangular coordinates of a point are given. Find polar coordinates of the point such that $r > 0$ and $0 \leq \theta < 2\pi$.

$$(10, -10)$$

The polar coordinates are $\left(10\sqrt{2}, \frac{7\pi}{4}\right)$

(Simplify your answer, including any radicals. Type an ordered pair. Type an exact answer, using π as needed. Use integers or fractions for any numbers in the expression.)

Score: 1 of 1 pt

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Test Score: 88.33%, 17.6



7.7.13

Plot the complex number and find its absolute value.

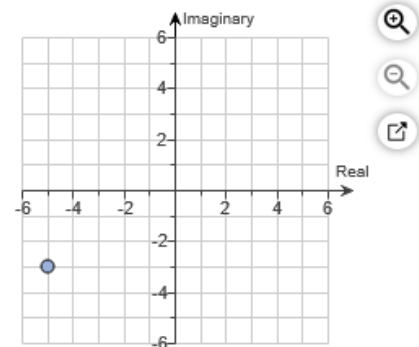
$$-5 - 3i$$

Plot the complex number on the complex plane to the right.

What is the absolute value of this complex number?

$$|-5 - 3i| = \sqrt{34}$$

(Simplify your answer. Type an exact answer, using radicals as needed.)



Score: 1 of 1 pt



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7.7.15

Write the complex number in polar form. Express the argument θ in degrees, with $0 \leq \theta < 360^\circ$.

$$-2\sqrt{2} + 2\sqrt{2}i$$

$$-2\sqrt{2} + 2\sqrt{2}i = 4 (\cos 135^\circ + i \sin 135^\circ)$$

Score: 0 of 1 pt

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Test Score: 88.33%, 17.67 of 20 pts

✖ 7.7.63



Raise the number to the given power and write standard notation for the answer.

$$\left(\frac{1}{2} + \frac{\sqrt{3}}{2} i \right)^{18}$$

$$\left(\frac{1}{2} + \frac{\sqrt{3}}{2} i \right)^{18} = 1$$

(Simplify your answer. Type an exact answer, using radicals as needed. Use integers or fractions for any numbers in the expression.)

You answered: $(\cos 0 + i \sin 0)$

[Get answer feedback](#)

bi. Type an exact answer, using radicals as needed. Use integers or fractions for any

I MADE THE SAME MISTAKE AGAIN! I didn't simplify this. So I definitely understand what's going on. with these based off of the notes. However so long as they are not complicated, you can further simplify.

$\cos 0 + i \sin 0 = 1 + i0$ (because $\sin 0^* = 0$, there is not complex number because $i0 = 0$)

$= 1$