

Review for Current Unit Mixed

Kickoff-

1) Complete the square $x^2 - 10x - 20 = 0$

2) Find $f^{-1}(x)$ if $f(x) = 4x - 9$

$x^2 - 10x = 20$
 $\frac{1}{2}(-10) = -5$
 $(x-5)^2 = 20 + 25$
 $\sqrt{(x-5)^2} = \sqrt{45}$
 $x-5 = \pm 3\sqrt{5}$
 $x = 5 \pm 3\sqrt{5}$
 or
 $x = 5 \pm \sqrt{45}$

Switch x and y
 $y = 4x - 9$
 $x = 4y - 9$
 $x + 9 = 4y$
 $\frac{x+9}{4} = y = f^{-1}(x)$

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Homework Answers Days 1-2

① $\sin = \frac{15}{17}$
 $\cos = \frac{8}{17}$
 $\tan = \frac{15}{8}$

② $\sin = \frac{4}{\sqrt{65}}$
 $\cos = \frac{1}{\sqrt{65}}$
 $\tan = \frac{4}{1}$

③ $\sin = \frac{12}{13}$
 $\cos = \frac{5}{13}$
 $\tan = \frac{12}{5}$

④ $\sin = \frac{3}{4}$
 $\cos = \frac{4}{5}$
 $\tan = \frac{3}{4}$

⑤ $\sin = \frac{4}{5}$
 $\cos = \frac{3}{5}$
 $\tan = \frac{4}{3}$

⑥ 25.4

⑦ 13

⑧ 25

⑨ 9.8

⑩ 7

⑪ 12

⑫ 16.5

⑬ 10.8

⑭ 12.1

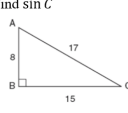
⑮ 5.2

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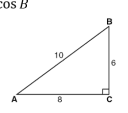
Homework Answers Day 3-6

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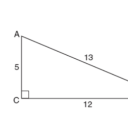
1) Find $\sin C$



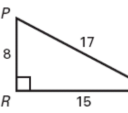
2) Find $\cos B$



3) Find $\tan A$

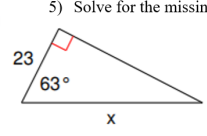


4) Find $\sin P$



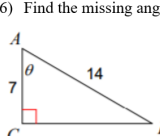
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5) Solve for the missing side. Round your answer to the nearest tenth.

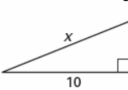


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6) Find the missing angle. Round your answer to the nearest degree.



7) Solve for the missing side of the triangle. Round your answer to the nearest tenth.



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8) The angle of elevation of the top of the building at a distance of 50 m from its foot on a horizontal plane is found to be 60 degrees. Find the height of the building.

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9) Use the triangle to the right to answer both parts.

A) Find the value of x .

B) Find the value of angle θ . Round your answer to the nearest degree.

10) Solve for the missing angle. Round your answer to the nearest degree.

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11) A 15-foot ladder is placed on the side of a building. The ladder makes an angle of 70° with the ground. How high up the wall the ladder will reach?

12) Solve for the missing side. Round your answers to the nearest tenth.

13) Find $\tan \theta$

14) Find $\sin \theta$

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15) Solve for the missing angle. Round your answers to the nearest degree.

16) Use the triangle to the right.

a. Find the value of x .

b. Find the value of angle θ . Round your answer to the nearest degree.

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17) Solve for the missing side. Round your answer to the nearest tenth.

18) A building 14.5 m tall casts a shadow of 11.4 m along the level ground. At what angle do the rays of the sun hit the ground?

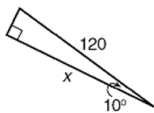
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19) Henry is flying a kite. The kite string makes an angle of 43° with the ground. If Henry is standing 100 feet from a point on the ground directly below the kite, find the length of the kite string.

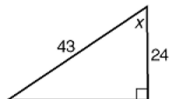
20) A kite is flying 115 ft above the ground. The length of the string to the kite is 150 ft, measured from the ground. Find the angle, to the nearest degree, that the string makes with the ground.

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21) Find the side of the triangle. Round your answer to the nearest tenth.



22) Find the missing angle. Round your answer to the nearest degree.



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