

Name:

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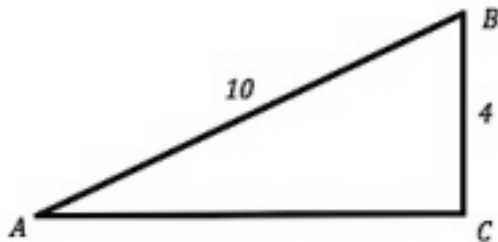
HOMEWORK 6.10

SECONDARY MATH II

In each triangle find the missing angles and sides. In all questions $m\angle C = 90^\circ$.

1.

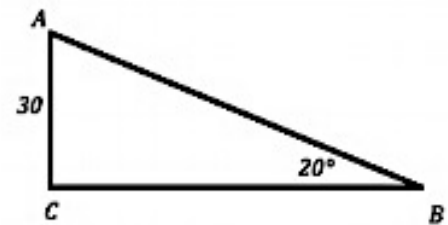
4.



a. $m\angle A =$ b. $m\angle B =$ c. $AC =$

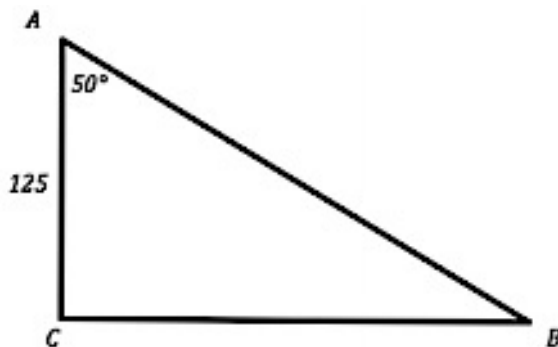
2.

5.



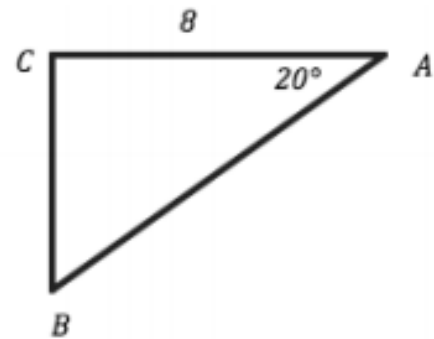
a. $m\angle A =$ b. $AB =$ c. $BC =$

3.



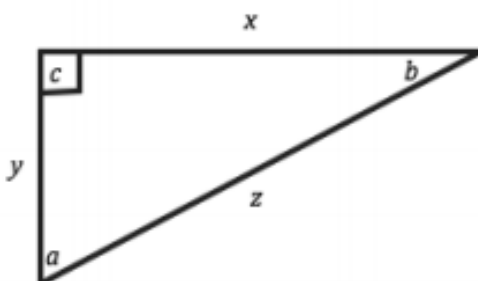
a. $m\angle B =$ b. $AB =$ c. $BC =$

4.



a. $m\angle B =$ b. $AB =$ c. $BC =$

5.



a. $\sin(a) =$

b. $\cos(a) =$

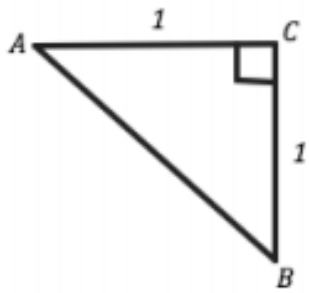
c. $\tan(a) =$

d. $\sin(b) =$

e. $\cos(b) =$

f. $\tan(b) =$

6.



a. $\sin(A) =$

b. $\cos(A) =$

c. $\tan(A) =$

d. $\sin(B) =$

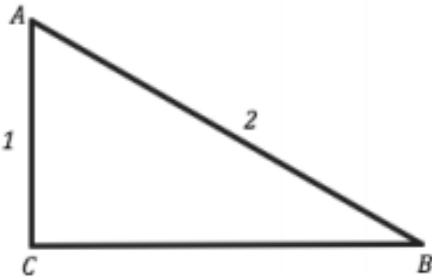
e. $\cos(B) =$

f. $\tan(B) =$

g. $m\angle A =$

h. $m\angle B =$

7.



a. $\sin(A) =$

b. $\cos(A) =$

c. $\tan(A) =$

d. $\sin(B) =$

e. $\cos(B) =$

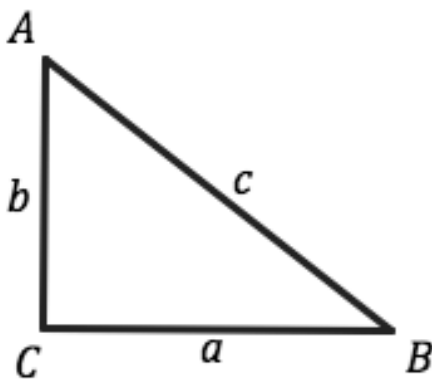
f. $\tan(B) =$

g. $m\angle A =$

h. $m\angle B =$

$m\angle C = 90^\circ$

8. Use the right triangle below to determine which of the following are equivalent.



a. $\sin(A)$

b. $\cos(A)$

c. $\tan(A)$

d. $\sin(B)$

e. $\cos(B)$

f. $\tan(B)$

g. $\frac{\sin(A)}{\cos(A)}$

h. $\frac{1}{\tan(A)}$

i. 1

j. $a^2 + b^2$

k. c^2

l. $\sin^2(b) + \cos^2(b)$

Answers:

1. $m\angle A = 23.58^\circ$

5. a) $\frac{x}{z}$

7. a) $\frac{\sqrt{3}}{2}$

$m\angle B = 66.42^\circ$

b) $\frac{y}{z}$

b) $\frac{1}{2}$

g) 60°

$AC = \sqrt{84}$

d) $\frac{y}{z}$

c) $\sqrt{3}$

f) 30°

3. $m\angle B = 40^\circ$

f) $\frac{y}{x}$

e) $\frac{1}{2}$

8. i and l, a and e, etc.

$AB = 163.18$

$BC = 148.97$

