

# Worksheet

05/20/2020

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Problem quickname: 3335

1)

For a triangle, consider the length of one side  $a, b, c$ , the length of the corresponding height  $h_a, h_b$  or  $h_c$  and the area  $A$ . Calculate the respective missing value.

- a)  $h_a = 7.6$  cm,  $h_c = 9.1$  cm,  $A = 127.3$  cm<sup>2</sup>,  $a = ?$
- b)  $h_c = 2.8$  cm,  $h_a = 3.9$  cm,  $A = 9.8$  cm<sup>2</sup>,  $c = ?$
- c)  $h_c = 50$  cm,  $h_b = 41$  cm,  $A = 1025$  cm<sup>2</sup>,  $b = ?$
- d)  $b = 47$  cm,  $c = 40$  cm,  $A = 940$  cm<sup>2</sup>,  $h_c = ?$
- e)  $h_b = 3.9$  cm,  $h_c = 48.6$  cm,  $A = 97.2$  cm<sup>2</sup>,  $c = ?$

2)

For a triangle, consider the length of one side  $a, b, c$ , the length of the corresponding height  $h_a, h_b$  or  $h_c$  and the area  $A$ . Calculate the respective missing value.

- a)  $h_b = 7.4$  cm,  $h_a = 3.5$  cm,  $A = 14.8$  cm<sup>2</sup>,  $b = ?$
- b)  $h_a = 22.3$  cm,  $h_c = 22.8$  cm,  $A = 386.91$  cm<sup>2</sup>,  $a = ?$
- c)  $h_c = 13.7$  cm,  $h_b = 19.8$  cm,  $A = 198$  cm<sup>2</sup>,  $b = ?$
- d)  $h_b = 31.6$  cm,  $h_a = 12.6$  cm,  $A = 236.88$  cm<sup>2</sup>,  $a = ?$
- e)  $a = 29$  cm,  $b = 17$  cm,  $A = 224.75$  cm<sup>2</sup>,  $h_a = ?$
- f)  $h_b = 36.5$  cm,  $h_a = 24.1$  cm,  $A = 693.5$  cm<sup>2</sup>,  $b = ?$
- g)  $a = 68.5$  cm,  $b = 35$  cm,  $h_b = 46.6$  cm,  $A = ?$
- h)  $c = 33$  cm,  $b = 38$  cm,  $A = 605.55$  cm<sup>2</sup>,  $h_c = ?$
- i)  $h_c = 29.9$  cm,  $h_a = 13.3$  cm,  $A = 283.96$  cm<sup>2</sup>,  $a = ?$
- j)  $c = 36$  cm,  $b = 5$  cm,  $A = 62$  cm<sup>2</sup>,  $h_b = ?$

3)

For a triangle, consider the length of one side  $a, b, c$ , the length of the corresponding height  $h_a, h_b$  or  $h_c$  and the area  $A$ . Calculate the respective missing value.

- a)  $h_b = 26.2$  cm,  $A = 170.3$  cm<sup>2</sup>,  $b = ?$
- b)  $h_b = 24$  cm,  $A = 492$  cm<sup>2</sup>,  $b = ?$
- c)  $h_b = 22.5$  cm,  $A = 112.5$  cm<sup>2</sup>,  $b = ?$
- d)  $h_b = 6.3$  cm,  $A = 132.3$  cm<sup>2</sup>,  $b = ?$
- e)  $a = 42.5$  cm,  $h_a = 20.2$  cm,  $A = ?$

4)

For a triangle, consider the length of one side  $a, b, c$ , the length of the corresponding height  $h_a, h_b$  or  $h_c$  and the area  $A$ . Calculate the respective missing value.

- a)  $c = 22$  cm,  $b = 8$  cm,  $A = 70.4$  cm<sup>2</sup>,  $h_b = ?$
- b)  $a = 52.6$  cm,  $b = 27$  cm,  $h_a = 21.4$  cm,  $A = ?$

- c)  $c = 45$  cm,  $b = 49$  cm,  $A = 779.1$  cm<sup>2</sup>,  $h_b = ?$   
d)  $h_a = 23.4$  cm,  $h_c = 25.4$  cm,  $A = 482.6$  cm<sup>2</sup>,  $c = ?$   
e)  $h_a = 7.2$  cm,  $h_b = 8.2$  cm,  $A = 139.4$  cm<sup>2</sup>,  $b = ?$

Good Luck!