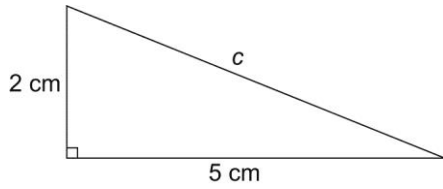


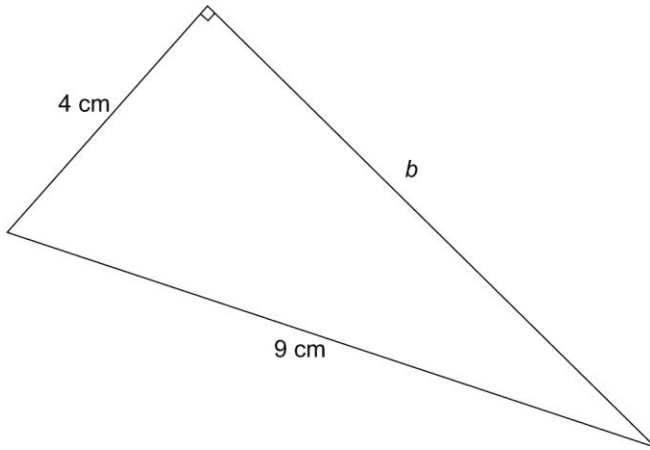
Master 1.22b **Test Review continued**

4. Find the length of the indicated side in each triangle.

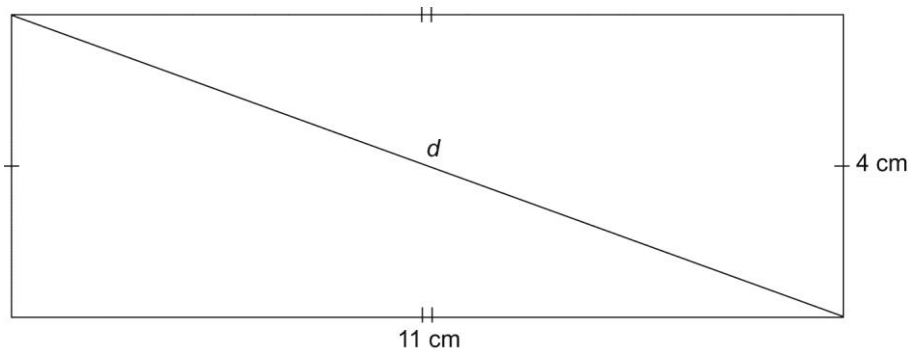
a)



b)



5. Find the length of the diagonal, d , in this rectangle.



Master 1.22c**Test Review continued**

6. Simplify.

a) 13^2

b) $\sqrt{100}$

c) $\sqrt{42^2}$

7. Is each statement true or false? Explain.

a) $\sqrt{19}$ is between 10 and 11.

b) $\sqrt{7} \times \sqrt{7} = 7$

c) 6, 14, $\sqrt{232}$ is a Pythagorean triple.

8. Determine whether a triangle with each set of side lengths is a right triangle. Justify your answers.

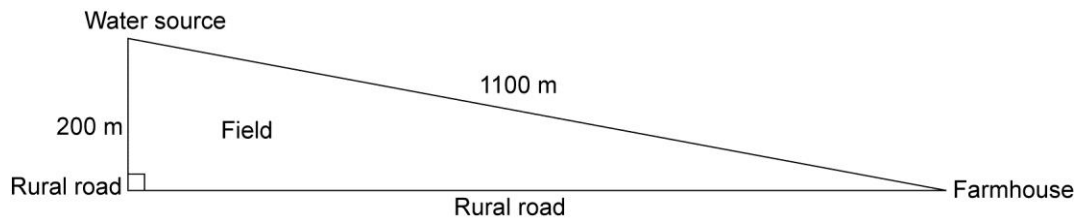
a) 7 cm, 7 cm, and 10 cm

b) 8 cm, 11 cm, and $\sqrt{185}$ cm

Master 1.22d

Test Review continued

9. A farmer wants to have a water pipe installed from the water source to his farmhouse. He has two options.
He can have the water pipe follow the rural roads. This option costs \$30/m.
He can have the water pipe go directly to the farmhouse, through his field.
This option costs \$45/m.



- a) What is the cost of running the water pipe directly from the water source to the farmhouse?
- b) What is the cost of running the water pipe to the farmhouse along the rural roads?
- c) Which is the better option? Explain.