

# Practice 2

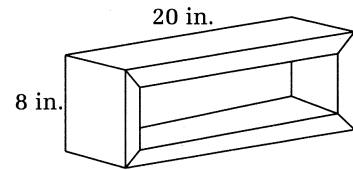
For use with Section 1-2

Tell whether each set of measurements can be the lengths of the sides of a triangle.

- 1. 4 in., 10 in., 5 in.
- 2. 6 ft, 6 ft, 3 ft
- 3. 15 m, 12 m, 17 m
- 4. 8 ft, 20 ft, 12 ft
- 5. 37 cm, 5 cm, 43 cm
- 6. 9 in., 10 in., 18 in.
- 7. List the side lengths of all triangles that have whole-number side lengths and a perimeter of 15.

- 8. List all ways to make 25 cents in change using pennies, nickels, and/or dimes, and using 10 or fewer coins.

- 9. Percy Robinson wants to make a wall unit to hold his stereo system, using wood rectangles standing on their sides, as shown. The rectangles must measure 8 in. by 20 in., and there are to be 6 of them. How can he cut these lengths from 6-ft long boards so as to use the fewest boards?



- 10. Young Hee has stamps in the denominations shown in the table at the right.

Denomination of stamp	Number of stamps
\$.04	3
\$.05	8
\$.10	9
\$.23	5

- a. List all the ways she can put stamps on a letter that requires at least \$.32 postage, using 4 or fewer stamps and not using any unnecessary stamps.
- b. What is the largest number of letters, each requiring \$.32 postage, that Young Hee can mail using the stamps she has?

- 11. Zenaida Mendez runs a TV and VCR repair shop. The jobs scheduled for tomorrow, together with the amount of time each job will take, are shown in the table at the right. Zenaida employs part-time technicians who work 4 hours per day.

Job	Time (h)
Replace TV tube	1.0
Align TV picture	1.4
Replace TV audio	2.0
Repair VCR	2.8
Install new TV tuner	0.6
Replace VCR heads	2.2
Calibrate VCR	1.4

- a. What is the least number of technicians needed to complete all the jobs?
- b. How should Zenaida Mendez assign the jobs so as to use the fewest technicians?