

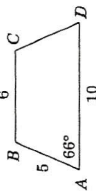
Test 26 Supplementary Test

Lessons 7-1 through 7-5

Directions: Write answers in the spaces provided.

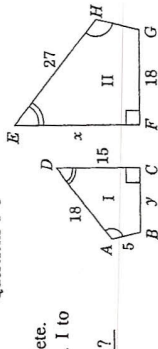
- In Questions 1-3, $\triangle COG \sim \triangle BAT$.
 1. $\angle C \cong$ 7
 2. $\frac{CG}{BT} = \frac{OG}{T}$
 3. $\triangle OCG \sim$ 7

$ABCD$ is an isosceles trapezoid with $\overline{BC} \parallel \overline{AD}$. Find the value of each ratio.



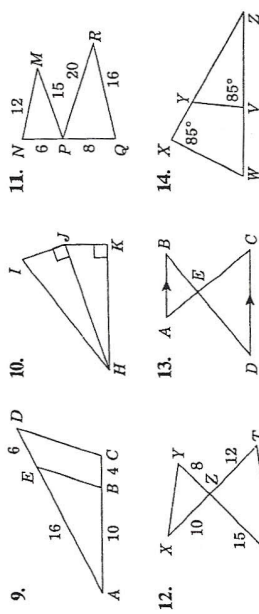
4. $BC : AD$
 5. $m\angle A : m\angle D$
 6. AD : perimeter of $ABCD$

Questions 4-6



7. Quad. I \sim quad. II. Complete.
 a. The scale factor of quad. I to quad. II is 7 .
 b. Quad. $ABCD \sim$ quad. 7 .
 c. $x =$ 7 d. $y =$ 7
 8. List the three reasons that can be used to prove that two triangles are similar.

Can the two triangles shown be proved similar? If so, state the similarity and tell which similarity postulate or theorem you would use. If not, write *none*.



9. AA
 10. SAS
 11. SAS
 12. SAS
 13. SAS
 14. SAS

15. A man 6 ft tall casts a 21 ft shadow at the same time a tree casts a 70 ft shadow. How tall is the tree?



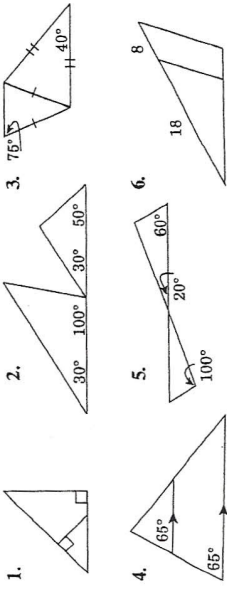
- Complete.
 16. $CD =$ 7
 17. $ED =$ 7

Test 27 Working with Similar Triangles

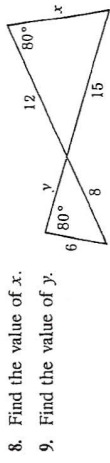
Lessons 7-4 through 7-6

Directions: Write answers in the spaces provided.

Tell whether the triangles are similar or not similar.



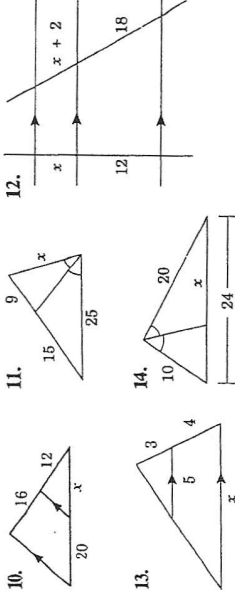
7. If $\triangle MNP \sim \triangle QSV$, complete the proportion: $\frac{MN}{Q} = \frac{MP}{S} = \frac{NP}{V}$.



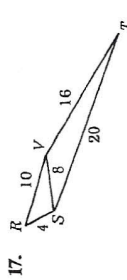
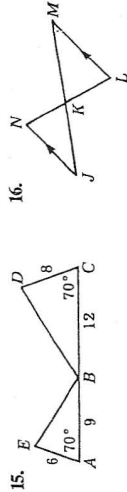
8. Find the value of x .
 9. Find the value of y .

Questions 8, 9

Find the value of x .



Decide whether the two triangles must be similar. If so, (a) write the similarity and (b) name the postulate or theorem that justifies your answer. If not, write *none* for both (a) and (b).



- Answers
 1. similar (5)
 2. similar (5)
 3. not similar (5)
 4. similar (5)
 5. similar (5)
 6. not similar (5)
 7. QS; QV; SV; (5)
 8. 11.25 (5)
 9. 6.4 (5)
 10. 15 (5)
 11. 15 (5)
 12. 4 (5)
 13. 11 2/3 (5)
 14. 16 (5)
 15. a. $\triangle EAB \sim \triangle DCB$ (5)
 b. SAS (5)
 16. a. $\triangle JKN \sim \triangle MKL$ (5)
 b. AA (5)
 17. a. $\triangle RSV \sim \triangle SVT$ (5)
 b. SSS (5)