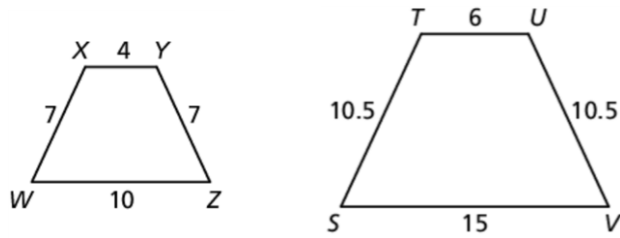


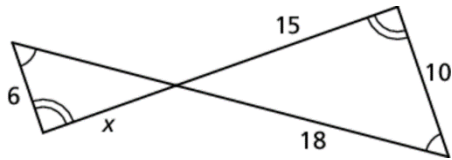
OPTIONAL Practice Test

1. The given polygons are similar. Find the scale factor if $WXYZ \sim STUV$



2. From #1, what would the ratios of the perimeters be? What would the ratios of the areas be?

3. The polygons are similar. Find the value of x .

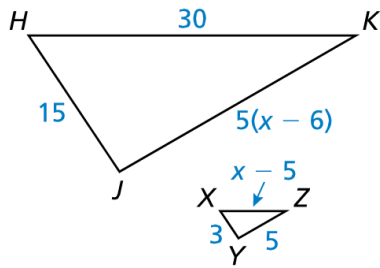


4. Figure A has an area of 180 m^2 and Figure B has an area of 80 m^2 . Figure A has a side length of 12 m. What is the corresponding side length in Figure B?

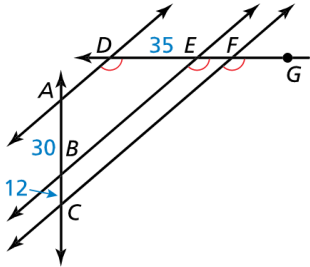
5. Figure A has a perimeter of 32 m and Figure B has a perimeter of 48 m. Figure A has a side length of 8 m. What is the corresponding side length in Figure A?

6. A school flagpole casts a shadow that is 45 ft long. At the same time, a boy who is 5 ft 8 in tall casts a shadow that is 51 in long. How tall is the flagpole to the nearest foot?

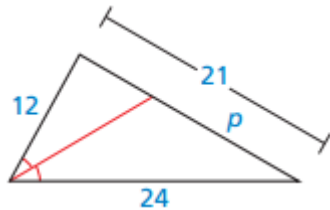
7. Find the value of x that makes $\triangle XYZ \sim \triangle HJK$.



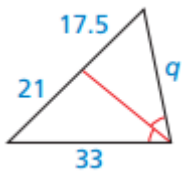
8. Find the length of segment EF.



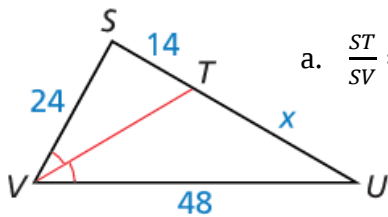
9. Find the value of p .



10. Find the value of q .



11. Which proportion is correct?



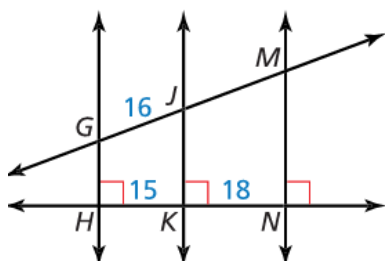
a. $\frac{ST}{SV} = \frac{VU}{TU}$

b. $\frac{VT}{ST} = \frac{TU}{VT}$

c. $\frac{VU}{SU} = \frac{VS}{SU}$

d. $\frac{ST}{TU} = \frac{VS}{VU}$

12. Complete the statement.

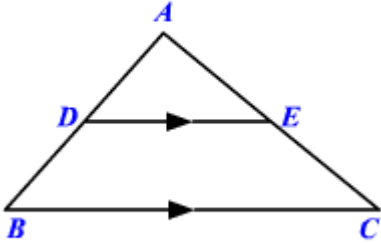


a. $\frac{GJ}{HK} = \frac{GM}{?}$

b. $\frac{?}{KN} = \frac{GJ}{HK}$

13. You are making a scale model of a rectangular park for a school project. Your model has a length of 2 feet and a width of 1.4 feet. The actual park is 800 yards long. What is the width of the actual park?

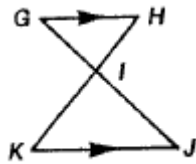
14. In the diagram, $DE = x$, $BC = 10$, $AE = (x + 1)$ and $EC = 6$. Find DE and AC .



15. Write a two-column proof.

Given: $\overline{GH} \parallel \overline{JK}$

Prove: $\triangle GHI \sim \triangle JKI$



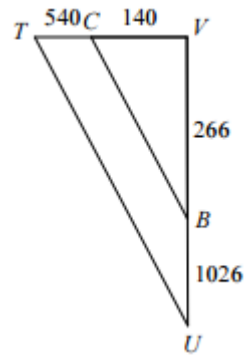
Statements

Reasons

16. Write a two-column proof.

Given: $CV = 140$, $TC = 540$, $VB = 266$ and $BU = 1026$

Prove: $\triangle CVB \sim TVU$



Statements

Reasons