

Gillespie

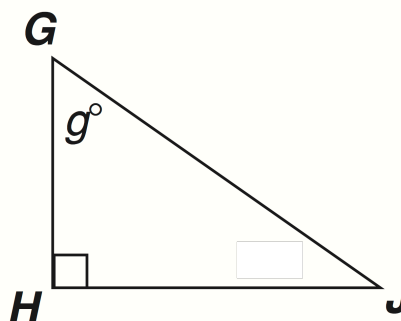
Course 3: Learning Check Ch2b

Rational Numbers

Directions: When working each of the following questions, be sure to show all work.

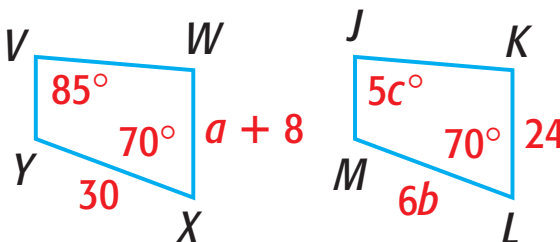
1) If $m\angle J = 30$, what is the value of g° ?

- a) 50
- b) 60
- c) 70
- d) 120



2) Quadrilateral $VWXY \cong JKLM$. Find c

- a) *undefined*
- b) 5
- c) 15
- d) 17



3) Dilate the figure's coordinates $A(6, -3)$; $B(3, -6)$; $C(12, -9)$; $D(9, -3)$; by a scale factor of $\frac{1}{3}$. What are the vertices of the image?

- a) $A'(2, -1)$; $B'(1, -2)$; $C'(4, -3)$; $D'(3, -1)$
- b) $A'(-1, 2)$; $B'(-2, 1)$; $C'(-3, 4)$; $D'(-1, 3)$
- c) $A'(1, 2)$; $B'(2, 1)$; $C'(3, 4)$; $D'(1, 3)$
- d) $A'(2, 1)$; $B'(1, 2)$; $C'(4, 3)$; $D'(3, 1)$

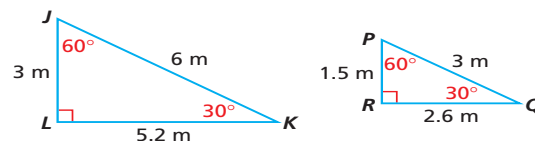
4) Determine whether the triangles are similar by angle-angle similarity.

a) *Yes; at least two angles are congruent*

b) *Yes; all angles add up to 180°*

c) *No; at least two angles need to be congruent*

d) *No; angle – angle similarity is fake*



5) Use the similar triangles to find the height of the tree.

- a) 3 *ft*
- b) 7 *ft*
- c) 11 *ft*
- d) 21 *ft*

