**Similar Shapes**

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| Name : | Class : | Date : |

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| **1)** The two rectangles shown below are similar.The sides of Rectangle EFGH are three times as big as rectangle ABCD. Find the length and width of rectangle EFGH.http://www.mathster.com/course/simgs/146832527200_1.pnghttp://www.mathster.com/course/simgs/146832527200_2.png      Length = ..... cm     Width = ..... cm | [1]   |
| **2)** The two rectangles shown below are similar.The sides of Rectangle EFGH are twice as big as rectangle ABCD. Find the length and width of rectangle ABCD.http://www.mathster.com/course/simgs/146832527200_3.pnghttp://www.mathster.com/course/simgs/146832527200_4.png      Length = ..... cm     Width = ..... cm | [1]   |
| **3)** The two rectangles shown below are similar.Find the missing length,  $x$, in rectangle ABCD.http://www.mathster.com/course/simgs/146832527200_5.pnghttp://www.mathster.com/course/simgs/146832527200_6.png       $x$ = ..... cm | [1]   |
| **4)** The two rectangles shown below are similar.Find the missing length,  $x$, in rectangle EFGH.http://www.mathster.com/course/simgs/146832527200_7.pnghttp://www.mathster.com/course/simgs/146832527200_8.png       $x$ = ..... cm | [1]   |
| **5)** The two triangles shown below are similar.Find the missing length,  $x$, in triangle ABC.http://www.mathster.com/course/simgs/146832527200_9.pnghttp://www.mathster.com/course/simgs/146832527200_10.png      ..... | [1]   |
| **6)** The two triangles shown below are similar.Find the missing length,  $x$, in triangle DEF.http://www.mathster.com/course/simgs/146832527200_11.pnghttp://www.mathster.com/course/simgs/146832527200_12.png      ..... | [1]   |
| **7)** Triangle ABC is similar to triangle DEF.http://www.mathster.com/course/simgs/146832527200_13.pnghttp://www.mathster.com/course/simgs/146832527200_14.png

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| Find | a) |    $x$ | ..... |   | b) |    $y$ | ..... |   |

 | [1]   |
| **8)** Triangle ABC is similar to triangle DEF.http://www.mathster.com/course/simgs/146832527200_15.pnghttp://www.mathster.com/course/simgs/146832527200_16.png

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Find | a) |    $v$ | ..... |   | b) |    $w$ | ..... | c) |    $x$ | ..... | d) |    $y$ | ..... |

 | [1]   |

**Solutions for the assessment Similar Shapes**

|  |  |
| --- | --- |
| **1)** Length = 27 cm, Width = 21 cm, | **2)** Length = 9 cm, Width = 7 cm, |
| **3)**  $x$ = 9 cm | **4)**  $x$ = 30 cm |
| **5)**  $x$ = 6 cm | **6)**  $x$ = 10 cm |
| **7)**  $x$ = 9 cm,  $y$ = 33 cm | **8)**  $v$ = 10 cm,  $w$ = 32 °,  $x$ = 46 °,  $y$ = 33 cm |