

## SM2H 7.5 Similarity Answer Key

1. congruent, proportional
2. scale factor
3.  $\triangle NLM$
4.  $\angle L$
5.  $\angle C$
6.  $\angle M$
7. AB, MN, CA
8.  $\frac{5}{3}$
9.  $x = 15$
10.  $y = 15$
11.  $z = 4$
12.  $w = 6$
13.  $x = 6$
14.  $x = 15$
15.  $x = 42$
16.  $x = 24$
17. PQ, XY, YZ, SP
18.  $67^\circ$
19.  $90^\circ$
20.  $\frac{5}{3}$
21.  $x = 10$
22.  $y = 8.4$
23. 60 feet
24. 5 inches
25. 12.5 feet
26.  $\triangle EFG$ , SAS
27.  $\triangle VUT$ , SSS
28.  $\triangle PVW$ , AA
29. not similar
30.  $\triangle WRQ$ , SAS
31.  $\triangle ACD$ , AA
32.  $\triangle DST$ , AA
33. not similar
34.  $\triangle FBC$ , SAS
35.  $x = 42$
36.  $x = 18$
37.  $x = 3$
38.  $x = 24$
39.  $x = 11$
40.  $x = 12$
41.  $\triangle EAD$
42. AD
43. 10

44.  $\frac{10}{3}$

45. 3

46.

Statements	Reasons
1. $\overline{WY} \parallel \overline{VZ}$	1. Given
2. $\angle 2 \cong \angle 4$	2. Corresponding Angle Postulate
3. $\angle 1 \cong \angle 1$	3. Reflexive Property of Congruence
4. $\triangle WXY \sim \triangle VXZ$	4. AA Similarity Postulate