Practice 6-3

Similar Figures and Scale Drawings

The scale of a map is $\frac{1}{2}$ in.: 8 mi. Find the actual distance for each map distance.

1. 2 in.

2. 5 in.

3. $3\frac{1}{2}$ in.

4. 10 in.

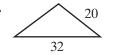
5. 8 in.

6. $7\frac{1}{4}$ in.

Each pair of figures is similar. Find the missing length. Round to the nearest tenth where necessary.

7.

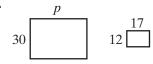
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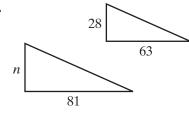


$$x =$$

8.

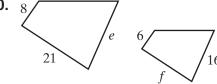


9.

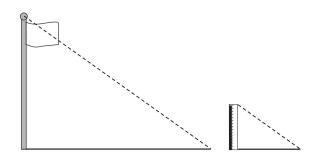


$$n =$$

10.



11. A meter stick casts a shadow 1.4 m long at the same time a flagpole casts a shadow 7.7 m long. The triangle formed by the meterstick and its shadow is similar to the triangle formed by the flagpole and its shadow. How tall is the flagpole?



A scale drawing has a scale of $\frac{1}{4}$ in. : 6 ft. Find the length on the drawing for each actual length.

12. 18 ft

13. 66 ft

14. 204 ft