Name: $\qquad$ Date: $\qquad$ Class: $\qquad$
$\qquad$

UNIT 6: Similar Figures (Part 2)

| Number of questions missed | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Homework Score | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0 |

Answer each question and round your answer to the nearest whole number.
(1) A man that is 6 ft tall casts a shadow that is 3 ft long. Find the height of a cardboard box that casts a 2 ft shadow.
(2) A baby elephant that is 4 ft tall casts a shadow that is 8 ft long. Find the height of an adult elephant that casts a 12 ft shadow.
(4) An 16 ft tall adult giraffe standing next to a baby giraffe casts an 8 ft shadow. If the baby giraffe is 6 ft tall then how long is its shadow?
(4) A particular house is 12 m wide. A model of it was built with a scale of $4 \mathrm{~cm}: 2 \mathrm{~m}$. How wide is the model?
$\boldsymbol{5}$ You are standing next to a statue. Use the information below to determine the unknown height of the statue.


Find the value for each variable in the similar figures.
6


$\theta$


8 Which of the following figures are similar to Figure X? (There may be more than one). Justify how you know.

a.

b.

c.

d.

© In the diagram below, $\overline{A B}$ is parallel to $\overline{D E}$. $A B=20$ inches, $D E=12$ inches, and $B C=15$ inches. What is the length of $\overline{D C}$ ?

(1DThe sail shown below has a horizontal stripe parallel to the base of the sail. What is the distance, $x$, from the bottom of the sail to the stripe?


