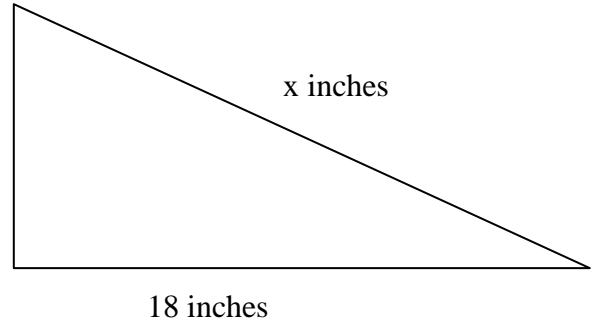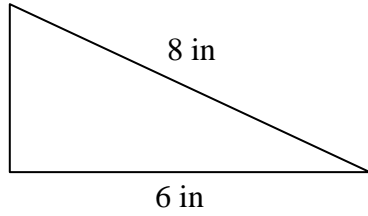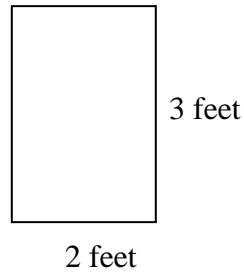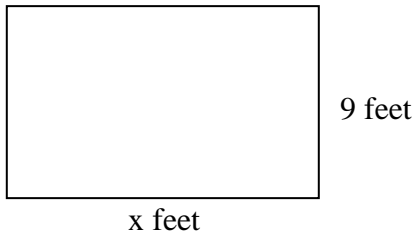Name_____ Period_____ Date_____

Proportions 1

For problems 1 – 4, set up the proportion for each set of similar figures and solve for the missing length.
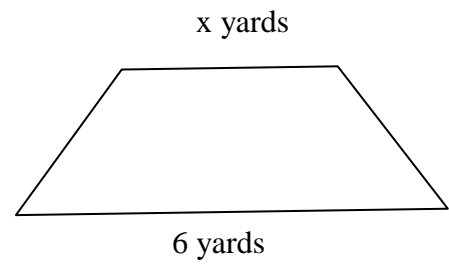
1.

8 in

6 in

x inches
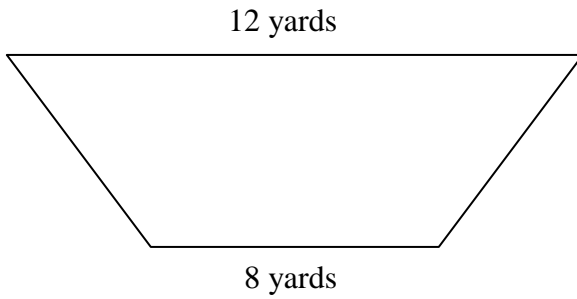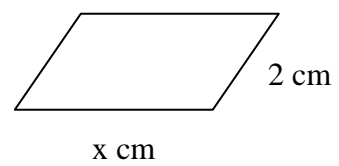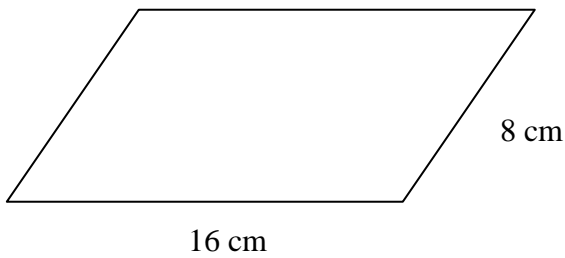
18 inches

2.

9 feet

x feet

3 feet

2 feet
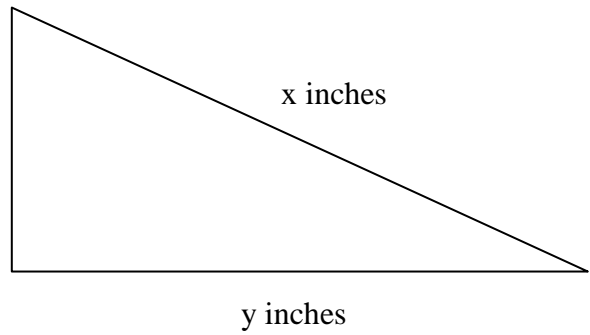
3.
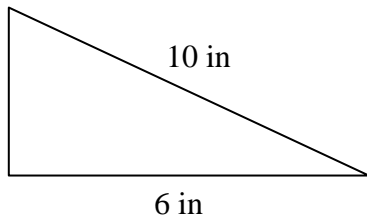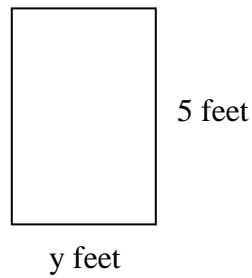
12 yards

8 yards

x yards

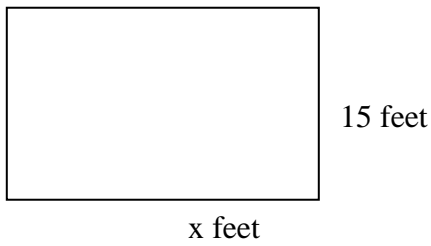6 yards

4.

8 cm

16 cm

2 cm

x cm

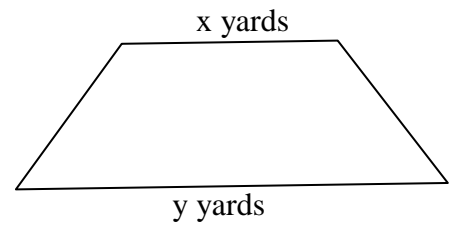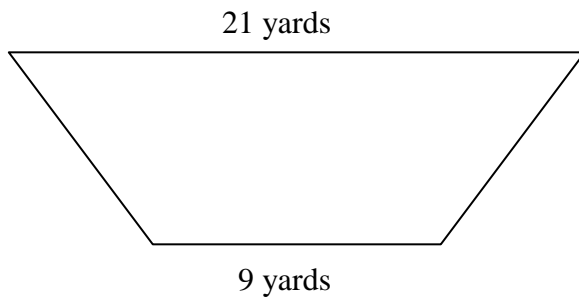**For problems 5 – 8, use the scale factor to find the missing lengths.**

5.   scale factor $= \dfrac{2}{3}$

10 in

6 in

x inches

y inches

6.   scale factor $= \dfrac{1}{2}$

15 feet

x feet

5 feet

y feet

7.   scale factor $= \dfrac{3}{4}$

21 yards

9 yards

x yards

y yards

8.   scale factor $= \dfrac{1}{4}$

y cm

20 cm

2 cm

x cm

Name_____ANSWER KEY_____ Period_____ Date_____

Proportions 1

For problems 1 – 4, set up the proportion for each set of similar figures and solve for the missing length.

1.

8 inches

24 inches

6 inches

18 inches

2.

9 feet

3 feet

13.5 feet

2 feet

3.

12 yards

4 yards

8 yards

6 yards

4.

8 cm

2 cm

20 cm

5 cm

For problems 5 – 8, use the scale factor to find the missing lengths.
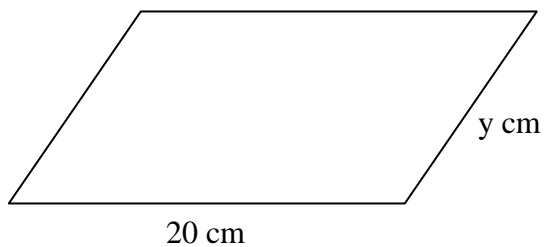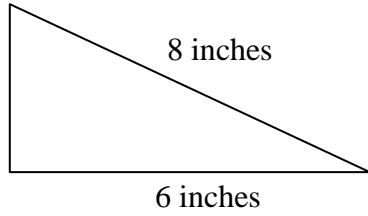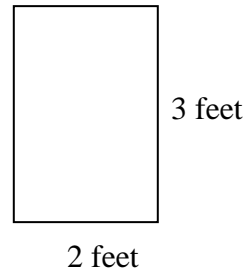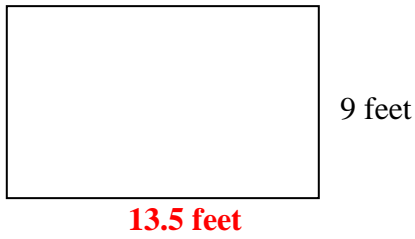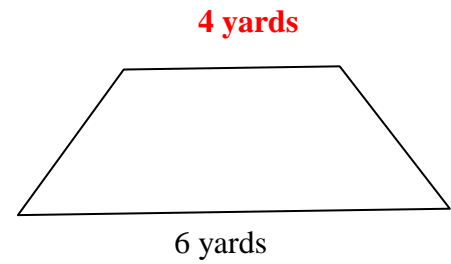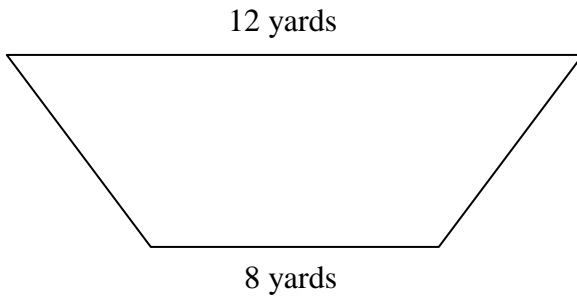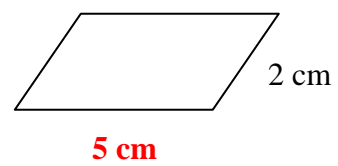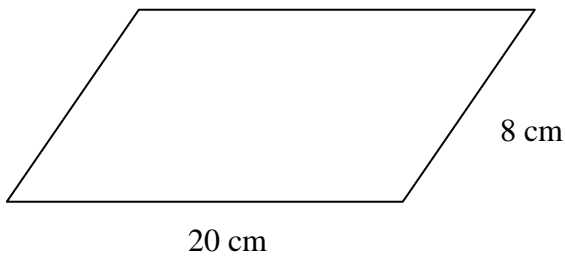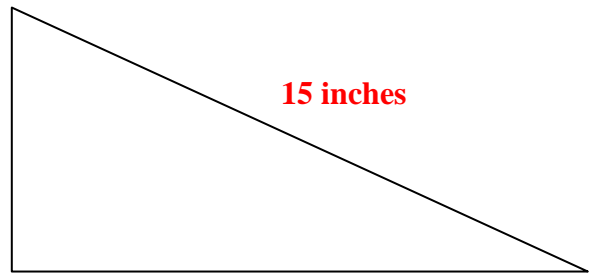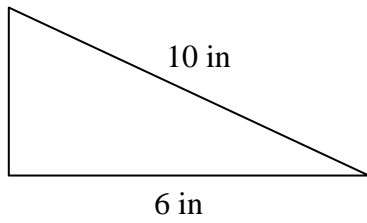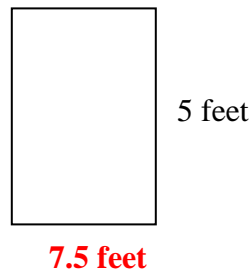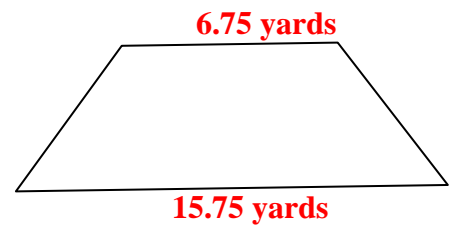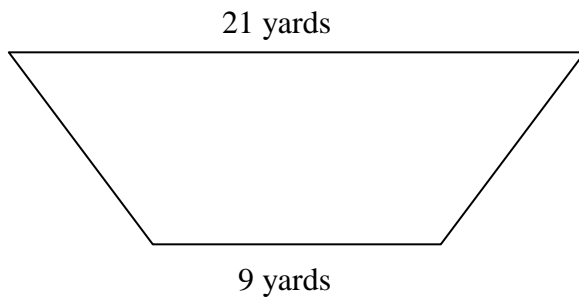
5.   scale factor = $\dfrac{2}{3}$

10 in

6 in

15 inches

9 inches

6.   scale factor = $\dfrac{1}{2}$

15 feet

10 feet

5 feet

7.5 feet

7.   scale factor = $\dfrac{3}{4}$

21 yards

9 yards

6.75 yards

15.75 yards

8.   scale factor = $\dfrac{1}{4}$

8 cm

20 cm

2 cm

5 cm