Name_____

Triangles with Fraction Side Lengths

Date_____ Period_____

Find the area of each triangle.

1)

3 yd

$3\frac{1}{3}$ yd

2)

$2\frac{1}{2}$ mi

4 mi

3)

$4\frac{1}{2}$ in
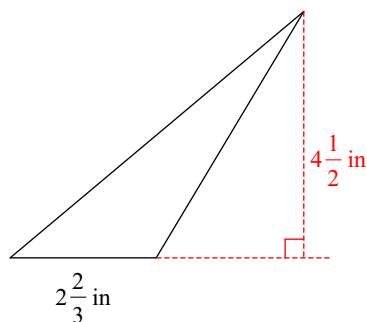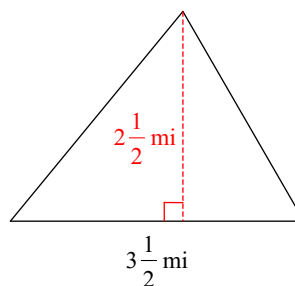
$2\frac{2}{3}$ in

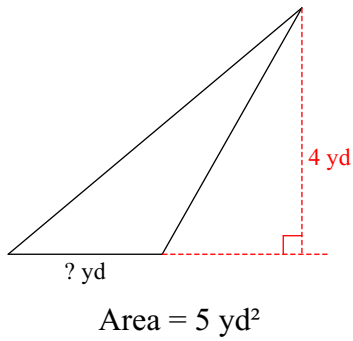4)

$2\frac{1}{2}$ mi

$3\frac{1}{2}$ mi

Solve each problem.

5) A triangle has a base of $1\frac{1}{3}$ ft and a height of $2\frac{2}{3}$ ft. What is the area of the triangle?
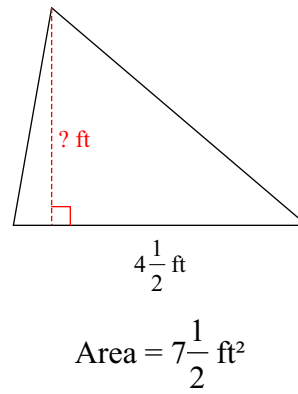
6) A triangle has a base of $4\frac{1}{2}$ in and a height of $4\frac{1}{2}$ in. What is the area of the triangle?

Find the missing measure for each triangle.

7)

4 yd

? yd

Area = 5 yd²

8)

? ft

$4\frac{1}{2}$ ft

Area = $7\frac{1}{2}$ ft²

Solve each problem.

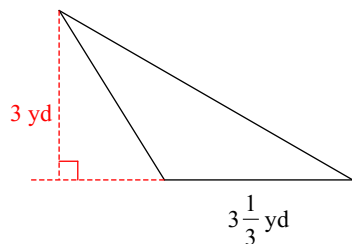9) A triangle has a base of $2\frac{1}{2}$ in and an area of $5\frac{5}{8}$ in². What is the height of the triangle?

10) A triangle has a height of $4\frac{1}{2}$ yd and an area of $10\frac{1}{8}$ yd². What is the base of the triangle?

Name_____

Triangles with Fraction Side Lengths

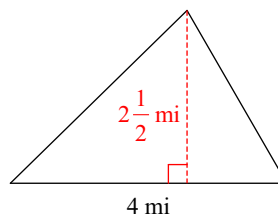Date_____ Period_____

Find the area of each triangle.

1)

3 yd

$3\frac{1}{3}$ yd

$A = \frac{1}{2} \times b \times h$

$A = \frac{1}{2} \times \frac{10}{3} \times 3$

5 yd²

2)

$2\frac{1}{2}$ mi

4 mi

$A = \frac{1}{2} \times b \times h$

$A = \frac{1}{2} \times 4 \times \frac{5}{2}$

5 mi²

3)

$4\frac{1}{2}$ in

$2\frac{2}{3}$ in
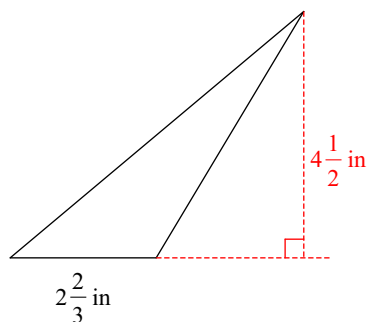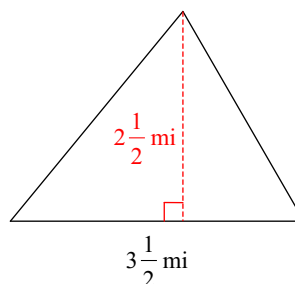
$A = \frac{1}{2} \times b \times h$

$A = \frac{1}{2} \times \frac{8}{3} \times \frac{9}{2}$

6 in²

4)

$2\frac{1}{2}$ mi

$3\frac{1}{2}$ mi

$A = \frac{1}{2} \times b \times h$

$A = \frac{1}{2} \times \frac{7}{2} \times \frac{5}{2}$

$4\frac{3}{8}$ mi²

Solve each problem.

5) A triangle has a base of $1\frac{1}{3}$ ft and a height of $2\frac{2}{3}$ ft. What is the area of the triangle?

$A = \frac{1}{2} \times b \times h$

$A = \frac{1}{2} \times \frac{4}{3} \times \frac{8}{3}$

$1\frac{7}{9}$ ft²

6) A triangle has a base of $4\frac{1}{2}$ in and a height of $4\frac{1}{2}$ in. What is the area of the triangle?

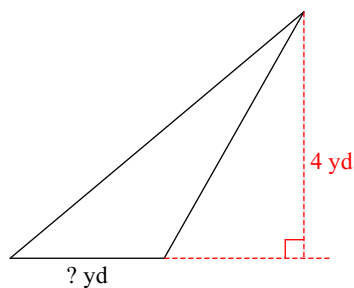$A = \frac{1}{2} \times b \times h$

$A = \frac{1}{2} \times \frac{9}{2} \times \frac{9}{2}$

$10\frac{1}{8}$ in²

Find the missing measure for each triangle.

7)

4 yd

? yd

Area = 5 yd²

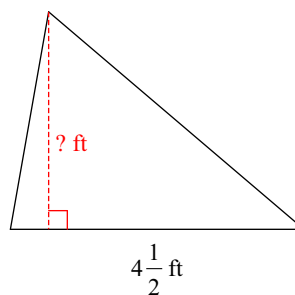$A = \dfrac{1}{2} \times b \times h$

$5 = \dfrac{1}{2} \times b \times 4$

$5 = b \times 2$

$b = 5 \div 2$

$b = 5 \times \dfrac{1}{2}$

$2\dfrac{1}{2}$ yd

8)

? ft

$4\dfrac{1}{2}$ ft

Area = $7\dfrac{1}{2}$ ft²

$A = \dfrac{1}{2} \times b \times h$

$\dfrac{15}{2} = \dfrac{1}{2} \times \dfrac{9}{2} \times h$

$\dfrac{15}{2} = \dfrac{9}{4} \times h$

$h = \dfrac{15}{2} \div \dfrac{9}{4}$

$b = \dfrac{15}{2} \times \dfrac{4}{9}$

$3\dfrac{1}{3}$ ft

Solve each problem.

9) A triangle has a base of $2\dfrac{1}{2}$ in and an area of $5\dfrac{5}{8}$ in². What is the height of the triangle?

$A = \dfrac{1}{2} \times b \times h$

$\dfrac{45}{8} = \dfrac{1}{2} \times \dfrac{5}{2} \times h$

$\dfrac{45}{8} = \dfrac{5}{4} \times h$

$h = \dfrac{45}{8} \div \dfrac{5}{4}$

$b = \dfrac{45}{8} \times \dfrac{4}{5}$

$4\dfrac{1}{2}$ in

10) A triangle has a height of $4\dfrac{1}{2}$ yd and an area of $10\dfrac{1}{8}$ yd². What is the base of the triangle?

$A = \dfrac{1}{2} \times b \times h$

$\dfrac{81}{8} = \dfrac{1}{2} \times b \times \dfrac{9}{2}$

$\dfrac{81}{8} = b \times \dfrac{9}{4}$

$b = \dfrac{81}{8} \div \dfrac{9}{4}$

$b = \dfrac{81}{8} \times \dfrac{4}{9}$

$4\dfrac{1}{2}$ yd