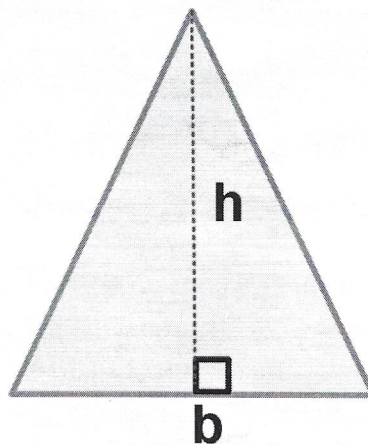|	
Date	**Lesson 4.2 Area of Triangles**
Essential Question	How can you derive a formula for the area of a triangle?
Formula	The area of a triangle is <u>one half the product of its base and height. The height must make a right angle with the base.</u>

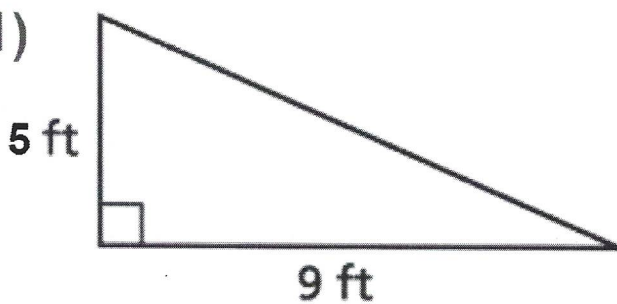$$A = \frac{1}{2}bh \quad \text{or} \quad A = \frac{bh}{2}$$

Composition Book

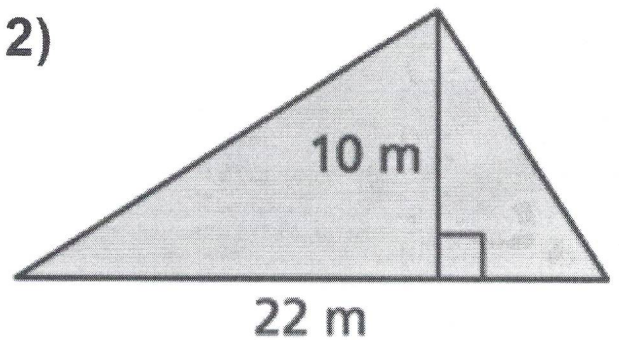## 4.2 Area of Triangles

Find the area of each triangle.

1)

5 ft

9 ft

2)

10 m

22 m

$A = \frac{1}{2}bh$

$A = \frac{1}{2}(9)5$

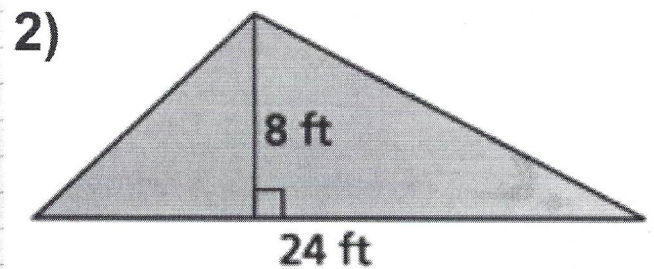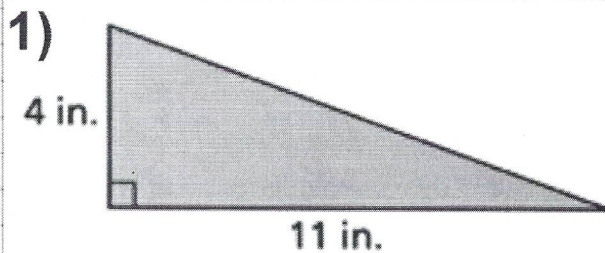$A = \frac{1}{2}(45)$

$A = 22.5 \text{ ft.}^2$

$A = \frac{1}{2}bh$

$A = \frac{1}{2}(22)10$

$A = 11(10)$

$A = 110 \text{ m}^2$

Complete numbers 1 and 2 on your notes page.

Find the area of each triangle.

1)

4 in.

11 in.

2)

8 ft

24 ft

$A = \frac{1}{2}bh$

$A = \frac{1}{2}(11)4$

$A = \frac{1}{2}(44)$

$A = 22 \text{ in.}^2$

$A = \frac{1}{2}bh$
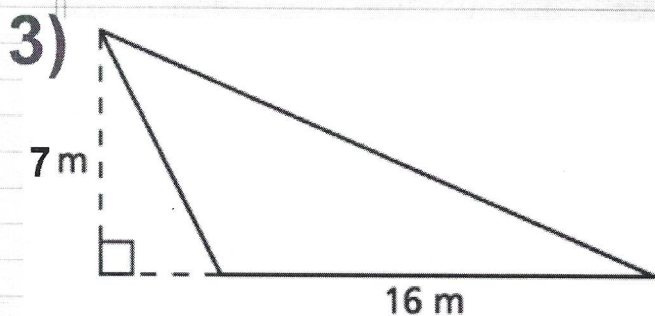
$A = \frac{1}{2}(24)8$

$A = 12(8)$

$A = 96 \text{ ft.}^2$

Complete numbers 3 and 4 in your composition book.
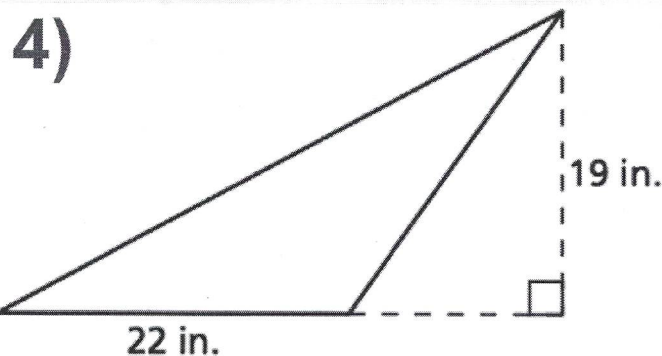
Find the area of each triangle.

3)

7 m

16 m

$A = \frac{1}{2}bh$

$A = \frac{1}{2}(16)7$

$A = 8(7)$

$A = 56 \text{ m}^2$

4)

19 in.

22 in.

$A = \frac{1}{2}bh$

$A = \frac{1}{2}(22)19$
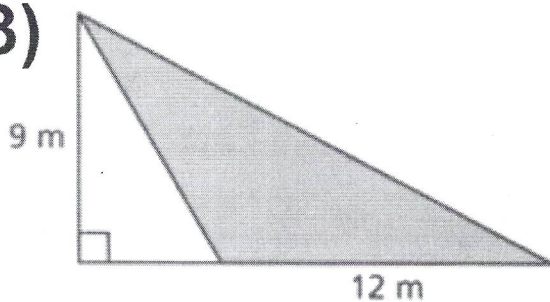
$A = 11(19)$

$A = 209 \text{ in.}^2$

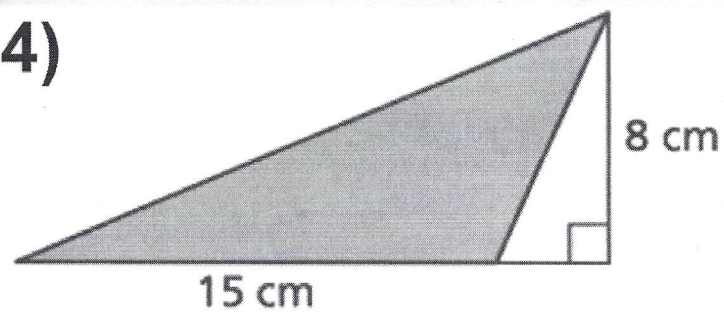Complete numbers 3 and 4 on your notes page.

Find the area of each triangle.

3)

9 m

12 m

4)

8 cm

15 cm

$A = \frac{1}{2}bh$

$A = \frac{1}{2}(12)9$

$A = 6(9)$

$A = 54 \text{ m}^2$

$A = \frac{1}{2}bh$

$A = \frac{1}{2}(15)8$

$A = \frac{1}{2}(120)$

$A = 60 \text{ cm}^2$