March 29, 2012

Get out Geometry WS2

3/29 - Perimeter/Area of Parallelograms/Triangles
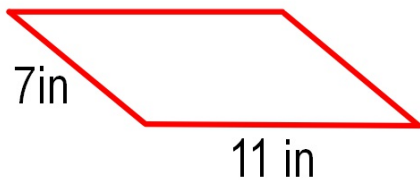
10 ft

8 ft

8 ft

10 ft
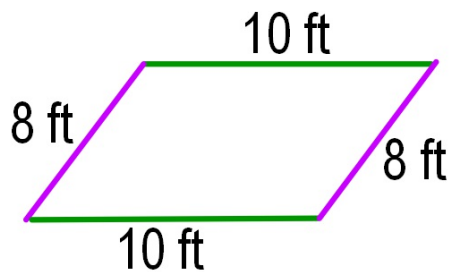
Find the perimeter of the parallelogram.

10 ft   10 ft   8 ft   8 ft
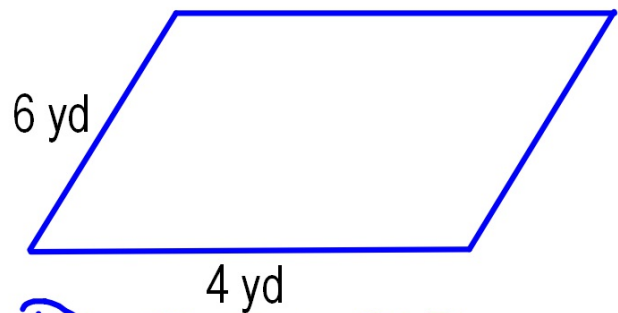
$2 \cdot 10$ $2 \cdot 8$
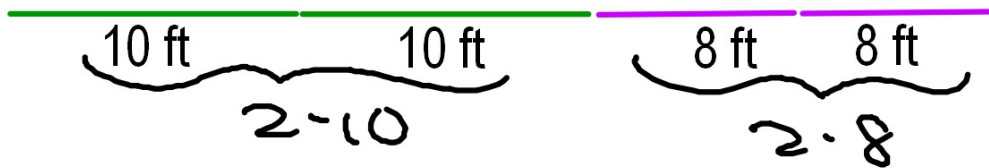
Formula: 2 x length of the base + 2 x length of the slanted side

$$P = 2B + 2S$$

Find the perimeter of these:

7in

11 in

$P = 2B + 2S$

$= 2 \cdot 11 + 2 \cdot 7$

$= 22 + 14$

$= 36$ in

6 yd

4 yd

$P = 2B + 2S$

$= 2 \cdot 4 + 2 \cdot 6$

$= 8 + 12$

$= 20$ yd

Sometimes you're given extra information!

8.8 cm

7.1 cm

8.8 cm

9 cm
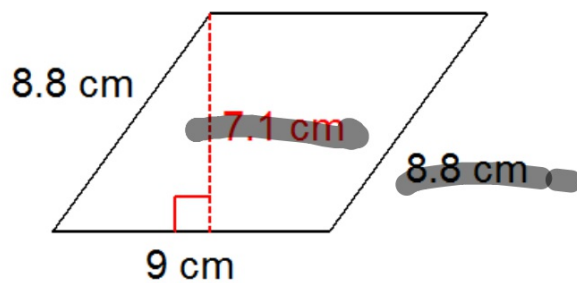
Find the perimeter.

$$P = 2B + 2S$$
$$= 2(9) + 2(8.8)$$
$$= 18 + 17.6$$
$$= 35.6 \text{ cm}$$
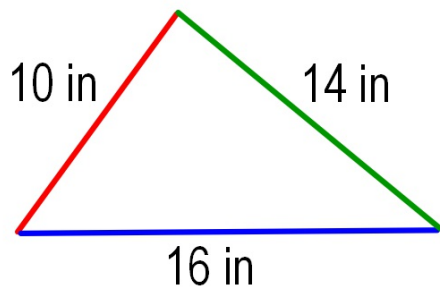
10 in   14 in

16 in

10 in   +   16 in   +   14 in

=   40 in

Formula: Add all of the sides together - that's as easy as it gets :)

Sometimes you're given extra information!

11 cm

10 cm

5.4 cm

6 cm
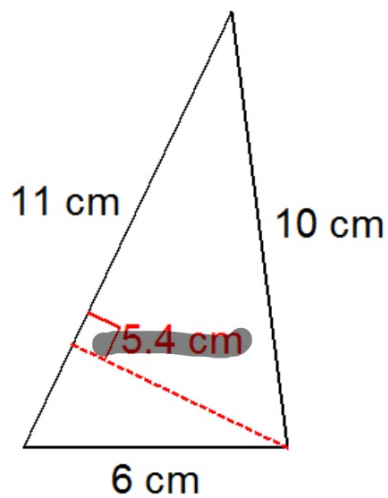
Find the perimeter.

$P = 10 + 11 + 6$

$= 27$ cm

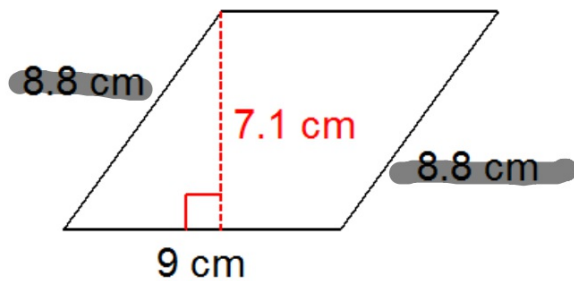Find the AREA of the parallelogram.
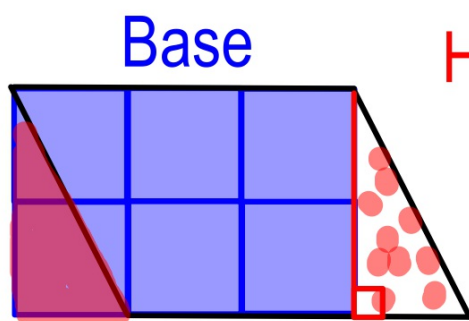
Base   **Height**

$$A = BH$$

Formula: Area = base x height

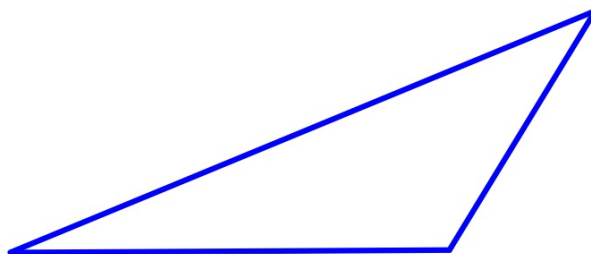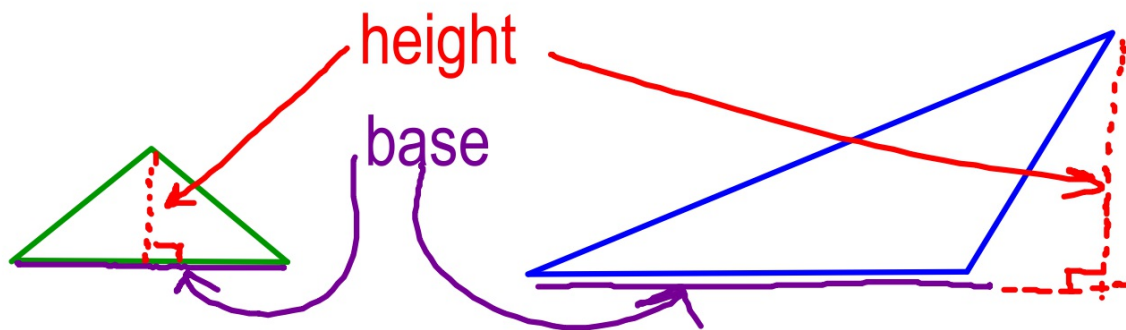# Sometimes you're given extra information!

8.8 cm

7.1 cm

8.8 cm

9 cm

Find the area.

$$A = BH$$
$$= 9 \times 7.1$$
$$= 63.9 \ cm^2$$

If you cut a parallelogram in half from corner to corner, you get a...
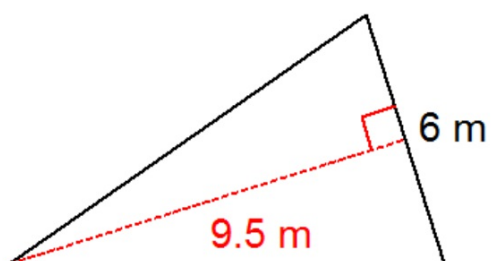
TRIANGLE!

height
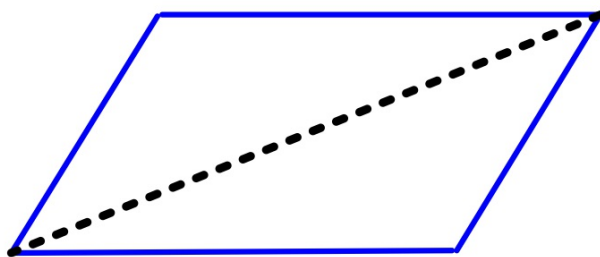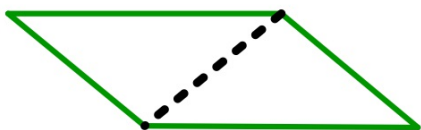
base

Since the triangle is half of a parallelogram,
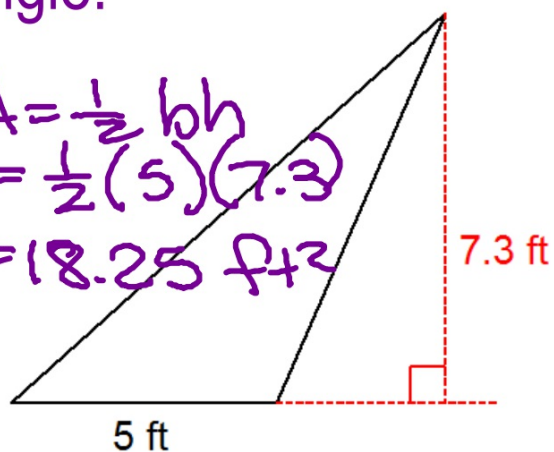its formula is half of the parallelogram formula.

Formula: Area = half of BH

$$A = \tfrac{1}{2} bh$$
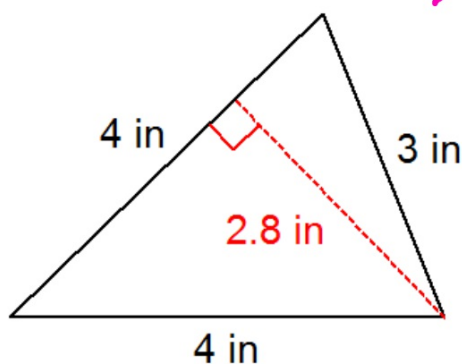
Find the AREA of each triangle.

6 m

9.5 m

$A = \frac{1}{2} b \cdot h$
$= \frac{1}{2} \times 6 \times 9.5$
$= 28.5 \text{ m}^2$

$A = \frac{1}{2} bh$
$= \frac{1}{2}(5)(7.3)$
$= 18.25 \text{ ft}^2$

7.3 ft

5 ft

4 in   3 in

2.8 in

4 in

$A = \frac{1}{2} bh$
$= \frac{1}{2} \times 4 \times 2.8$
$= 5.6 \text{ in}^2$

Sometimes you're given extra information!

Find the area.

11 cm

10 cm

5.4 cm

6 cm
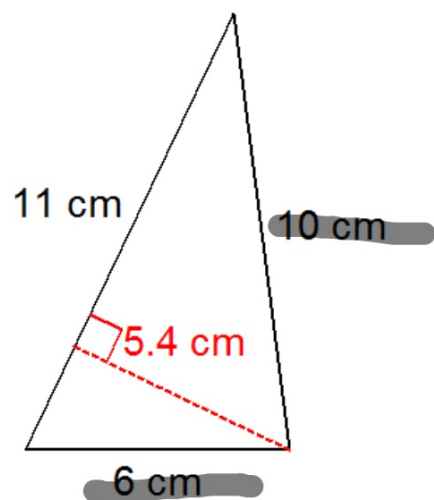
Homework

Green Geometry WS3

Due Friday