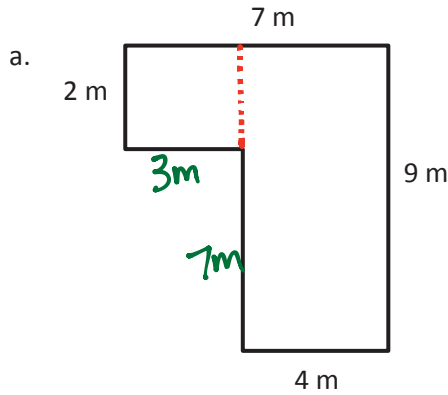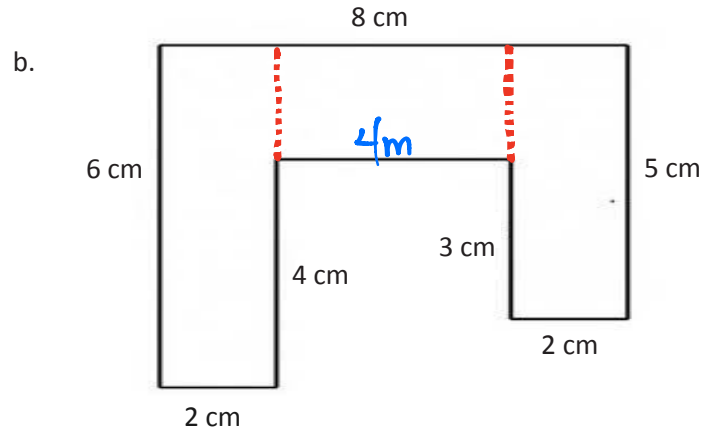Name _____   Date _____

1. The shapes below are made up of rectangles. Label the unknown side lengths. Then, write and solve an equation to find the perimeter of each shape.
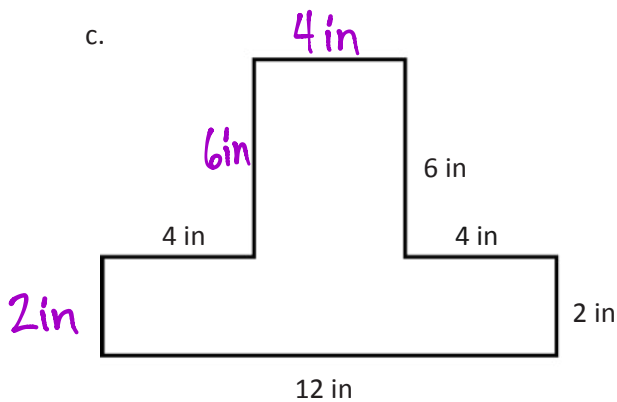
a.

7 m

2 m

3m

7m

9 m

4 m

$P = \underline{2m + 7m + 9m + 4m + 7m + 3m}$

$= 32m$

b.

8 cm

4m

6 cm

4 cm   3 cm

5 cm

2 cm

2 cm

$P = \underline{8cm + 5cm + (2 \times 2cm) + (2 \times 4cm) + 3cm + 6cm}$

$P = 34\,cm$

c.

4 in

6in

6 in

4 in   4 in

2in

2 in

12 in

$P = \underline{(2 \times 2\,in) + (2 \times 6\,in) + (3 \times 4\,in) + 12\,in}$

$P = 4\,in + 12\,in + 12\,in + 12\,in$

$P = 40\,in$

d.

2 ft

3 ft

3 ft

7 ft

1ft

3ft

3ft

8 ft
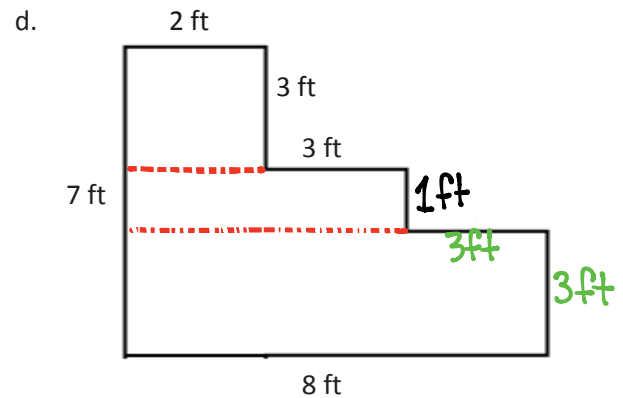
$P = \underline{(5 \times 3\,ft) + 7\,ft + 8\,ft}$

$P = 15\,ft + 15\,ft$

$P = 30\,ft$

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Lesson 17:   Use all four operations to solve problems involving perimeter and unknown measurements.

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2. Sari draws and labels the squares and rectangle below. Find the perimeter of the new shape.

6cm

18 cm

6 cm

6 cm

6cm

6cm

6cm
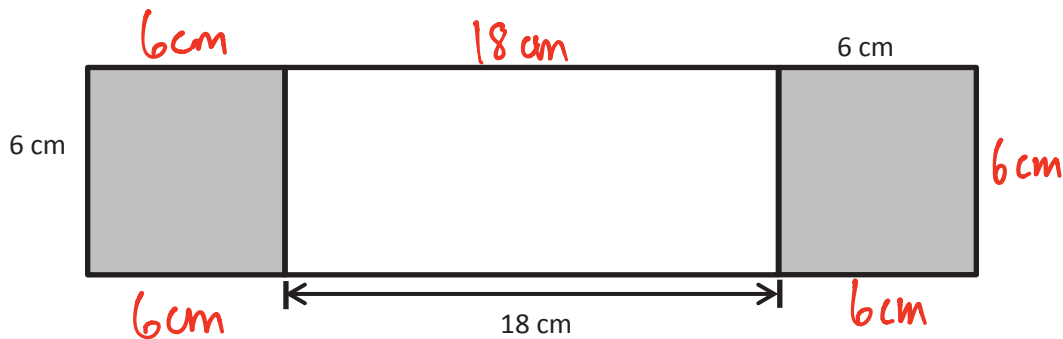
18 cm

$$P = (6 \times 6\,cm) + (2 \times 18\,cm)$$
$$= 36\,cm + 36\,cm$$
$$= 72\,cm$$

3. Label the unknown side lengths. Then, find the perimeter of the shaded rectangle.

18 in

2 in

13 in

8 in

6in

b in 6in

5 in

a in
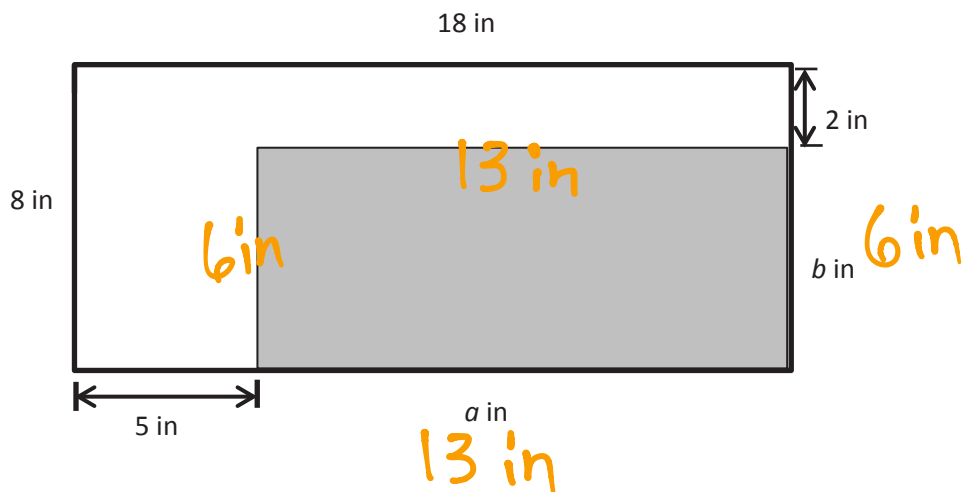
13 in

$$P = (2 \times 6\,in) + (2 \times 13\,in)$$
$$= 12\,in + 26\,in$$
$$= 38\,in$$

38 in

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