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## Unit 08 PC Form A

1. $\leftrightarrows$ Use pencil and paper to answer the question.

Find the perimeter of the polygon.


Number model: $\qquad$
Perimeter = $\qquad$ cm

ANSWER: Number model: $20+10+20+10=60$

$$
\text { Perimeter }=60 \mathrm{~cm}
$$

2. $\leftrightarrows$ Use pencil and paper to answer the question.

Find the perimeter of the polygon.


Number model: $\qquad$
Perimeter $=$ $\qquad$ m

ANSWER: Number model: $10+13+2+7+8+6=46$
Perimeter $=46 \mathrm{~m}$
$\qquad$
$\qquad$
$\qquad$

## Unit 08 PC Form A

3. Use pencil and paper to answer the question.

Find the perimeter of each polygon.
a.


Number model:
Perimeter $=$ $\qquad$ cm
b.


Number model:
Perimeter $=$ $\qquad$ cm

ANSWER:
a. Number model: $27+14+27+14=82$
a. Perimeter $=82 \mathrm{~cm}$
b. Number model: $16+6+5+11+11+17=66$

Perimeter $=66 \mathrm{~cm}$
4. Find the area of the polygon.


$$
\stackrel{\digamma}{1 \mathrm{~cm}}
$$

Area $=$ $\qquad$ square centimeters ANSWER: 9
$\qquad$
$\qquad$
$\qquad$

## Unit 08 PC Form A

5. Use pencil and paper to answer the question.

Find the area of each polygon.
a.


Area $=$ $\qquad$ square centimeters ANSWER:
a. 11
b. $11 \frac{1}{2}$
6. Find the area of the polygon.


Area $=$ $\qquad$ square centimeters
a. $10 \frac{1}{2}$
b. 11
c. 10
d. $9 \frac{1}{2}$

ANSWER: a
$\qquad$ Class: $\qquad$ Date: $\qquad$

## Unit 08 PC Form A

7. $\leftrightarrows$ Use pencil and paper to answer the question.

Draw a rectangle with an area of 35 square centimeters and a perimeter of 24 centimeters.
$\longmapsto$ 1 cm

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ANSWER:
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## Unit 08 PC Form A

8. Mrs. Lujan wants to tile her kitchen floor. The room is 8 feet wide and 14 feet long. How many 1 -square-foot tiles does she need to cover the floor?

$\qquad$ tiles

ANSWER: 112
9. $\curvearrowleft$ Use pencil and paper to answer the question.

Mrs. Jackson wants to tile her kitchen floor using tiles that are 4-inches on each side. The room is 9 feet wide and 14 feet long. How many 4 -inch tiles does she need to cover the floor?

$\qquad$ tiles
Explain the strategy you used to solve the problem.

## ANSWER: 1,134 tiles

Sample answer: The area of Mrs. Jackson's kitchen is 126 square feet. Since it takes 9 of the 4 -inch tiles to cover 1 square foot, it would take $9 * 126=1,134$ tiles to cover the floor.
10. Add.
$\frac{4}{11}+\frac{2}{11}=$ $\qquad$
$\qquad$
$\qquad$
$\qquad$

## Unit 08 PC Form A

11. Add.
$\frac{1}{4}+\frac{1}{16}=$ $\qquad$
ANSWER: $5 / 16$ or an equivalent fraction
12. Subtract.
$\frac{9}{12}-\frac{2}{12}=$ $\qquad$
ANSWER: 7/12 or an equivalent fraction
13. Subtract.
$工=\frac{13}{16}-\frac{1}{4}$
ANSWER: 9/16 or an equivalent fraction
14. $\leftrightarrows$ Use pencil and paper to answer the question. Add or subtract.
a. $\frac{3}{11}+\frac{3}{11}=$ $\qquad$ b. $\quad=\frac{1}{6}+\frac{1}{3}$
c. $\frac{10}{12}-\frac{1}{12}=$ $\qquad$
d. $\quad=\frac{13}{16}-\frac{1}{4}$

ANSWER:
a. $\frac{6}{11}$
b. $\frac{3}{6}$ or $\frac{1}{2}$
c. $\frac{9}{12}$ or $\frac{3}{4}$
d. $\frac{9}{16}$
$\qquad$
$\qquad$
$\qquad$

## Unit 08 PC Form A

15. $\curvearrowleft$ Use pencil and paper to answer the question. Add or subtract.
a. $\frac{1}{5}+\frac{3}{5}=$ $\qquad$ b. $\quad=\frac{7}{12}+\frac{1}{3}$
c. $\frac{7}{10}-\frac{2}{10}=$ $\qquad$ d. $\quad=\frac{8}{9}-\frac{1}{3}$

ANSWER:
a. $\frac{4}{5}$
b. $\frac{11}{12}$
c. $\frac{5}{10}$ or $\frac{1}{2}$
d. $\frac{5}{9}$
16. $ص$ Use pencil and paper to answer the question.

If you spin the spinner 600 times, how many times would you expect it to land
on green? $\qquad$
on blue? $\qquad$
on orange? $\qquad$ on white? $\qquad$


ANSWER: In 600 spins the spinner should land
on green 50 times
on blue 100 times
on orange 200 times
on white 250 times
17. A bag contains 5 red blocks, 5 blue blocks, 7 green blocks, and 3 orange blocks. You put your hand in the bag and, without looking, pull out a block. About what fraction of the time would you expect to get a red block?
$\qquad$
$\qquad$
$\qquad$

## Unit 08 PC Form A

18. $ص$ Use pencil and paper to answer the question.

Complete. Measure with a centimeter ruler.

base $=$ $\qquad$ cm perimeter $=$ $\qquad$ cm height $=$ $\qquad$ cm

Area $=$ $\qquad$ $\mathrm{cm}^{2}$

ANSWER: Because of differences in printer scaling, the intended measure may be inaccurate. The intended measures for this rectangle are:
base $=3 \mathrm{~cm}$; height $=2 \mathrm{~cm}$; perimeter $=10 \mathrm{~cm}$; Area $=6 \mathrm{~cm}^{2}$.
Measure the printed rectangle to determine the correct measurements based on your local printer settings.
19. $\square$ Use pencil and paper to answer the question.

Complete. Measure with a centimeter ruler.

base = $\qquad$ cm perimeter $=$ $\qquad$ cm
height $=$ $\qquad$ cm

Area = $\qquad$ $\mathrm{cm}^{2}$

ANSWER: Because of differences in printer scaling, the intended measure may be inaccurate. The intended measures for this rectangle are:
base $=5 \mathrm{~cm}$; height $=4 \mathrm{~cm}$; perimeter $=18 \mathrm{~cm}$; Area $=20 \mathrm{~cm}^{2}$.
Measure the printed rectangle to determine the correct measurements based on your local printer settings.
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$\qquad$
$\qquad$

## Unit 08 PC Form A

20. Use pencil and paper to answer the question.

Complete. Measure with a centimeter ruler.

base $=$ $\qquad$ $\mathrm{cm} \quad$ perimeter $=$ $\qquad$ cm
height $=$ $\qquad$ cm Area $=$ $\qquad$ $\mathrm{cm}^{2}$

ANSWER: The intended measures for this parallelogram are:

base $=4 \mathrm{~cm}$; height $=2 \mathrm{~cm}$; perimeter $=14 \mathrm{~cm}$; Area $=8 \mathrm{~cm}^{2}$
Measure the printed parallelogram to determine the correct measurements based on your local printer settings.
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## Unit 08 PC Form A

21. $\leftrightarrows$ Use pencil and paper to answer the question. Complete. Measure with a centimeter ruler.

$\begin{array}{ll}\text { base }=\ldots & \mathrm{cm} \\ \text { height }=\ldots & \text { perimeter }=\ldots \\ \mathrm{cm} & \text { Area }=\ldots \mathrm{cm}^{2}\end{array}$
ANSWER: The intended measures for this triangle are:

base $=4 \mathrm{~cm}$
height $=1.5 \mathrm{~cm}$
perimeter $=9 \mathrm{~cm}$
Area $=3 \mathrm{~cm}^{2}$
Measure the printed triangle to determine the correct measurements based on your local printer settings.
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$\qquad$

## Unit 08 PC Form A

22. $\leftrightarrows$ Use pencil and paper to answer the question.

Use the scale: 1 cm represents 10 meters.
Make a scale drawing of a rectangle 40 meters by 45 meters.

ANSWER: The rectangle drawn should measure 4 cm by 4.5 cm .

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## Unit 08 PC Form A

23. $ص$ Use pencil and paper to answer the question.

In each problem below, a scale and the lengths of hte sides of a rectangle are given. Make a scale drawing of each rectangle.
a. Scale: 1 cm represents 2 meters

Dimensions of rectangle:
4 meters by 11 meters
b. Scale: 1 cm represents 5 meters

Dimensions of rectangle:
15 meters by 20 meters

ANSWER:

The rectangle drawn should measure 2 cm by 5.5 cm .

The rectangle drawn should measure 3 cm by 4 cm .
a.

b.

24. Use pencil and paper to answer the question. Comparing Areas
Carefully cut out each of the shapes below.
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$\qquad$
$\qquad$

## Unit 08 PC Form A


a. Arrange shapes A-D in order of their area. (You may not measure with a ruler). List the letters of the shapes from smallest to largest. If some shapes have the same area, write the letters next to each other and circle them.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
b. Explain the steps you followed to figure out the order of each of the shapes. You may draw pictures to illustrate your steps.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Unit 08 PC Form A

c. Compare shapes $A$ and $E$. Tell which has the larger area. Explain how you compared the shapes.

ANSWER: a. A, B, C, D (there should be a circle around C and D ). AC and D is the smallest, and are the largest, and AC and D are the largest.
b. It is apparent that $A$ is half of $D$ when they are put on top of each other. $C$ is the same size as $D$ because you can cut $C$ apart and move the pieces of it to make it look like $D$. No matter how you move the pieces of B they do not cover all of D. No matter how you move the pieces of $A$ they do not cover all of $B$. So, $A$ is the smallest followed by $B$ and then C and D .
c. A and $E$ have the same area. Cut $A$ into pieces and arrange them until they look like $E$.

