

Order of Operations Worksheet

Solve in the correct order.

1 a. $7 - 3 \cdot 1^2$	1 b. $\frac{7}{4} + \frac{6 + 2}{10}$
2 a. $\frac{6}{8 - 5} + \frac{8}{2}$	2 b. $6 \cdot 6 + 5 + 5^2$
3 a. $4^3 - 7$	3 b. $3^3 \cdot 5$
4 a. $10 + 4 \cdot 3 - (2 - 1)$	4 b. $4 - \frac{2 \cdot 4}{6}$

BRAIN TEASERS

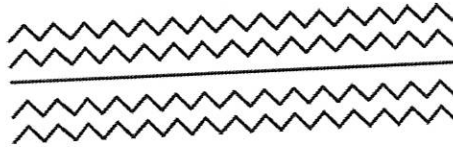
1. Emily loves cats and she keeps some as pets. All but two of them are completely black. All but two of them are completely white. All but two of them are completely ginger.

How many cats does she have in total ?



2. A family of five people drove in a car for 300 miles at an average speed of 50 miles per hour. For the whole journey nobody noticed that the car had a flat tyre.

How come nobody noticed?



3. Try to re-arrange the letters of **NEW DOOR** to make one word.

4. A school orchestra with six musicians can play the first section of Beethoven's 5th symphony in 7 minutes and 23 seconds.



How long would it take to play if they doubled the number of musicians?

5. Tom owns an antique grandfather clock made in the year 1877.

How long is it designed to go without winding?

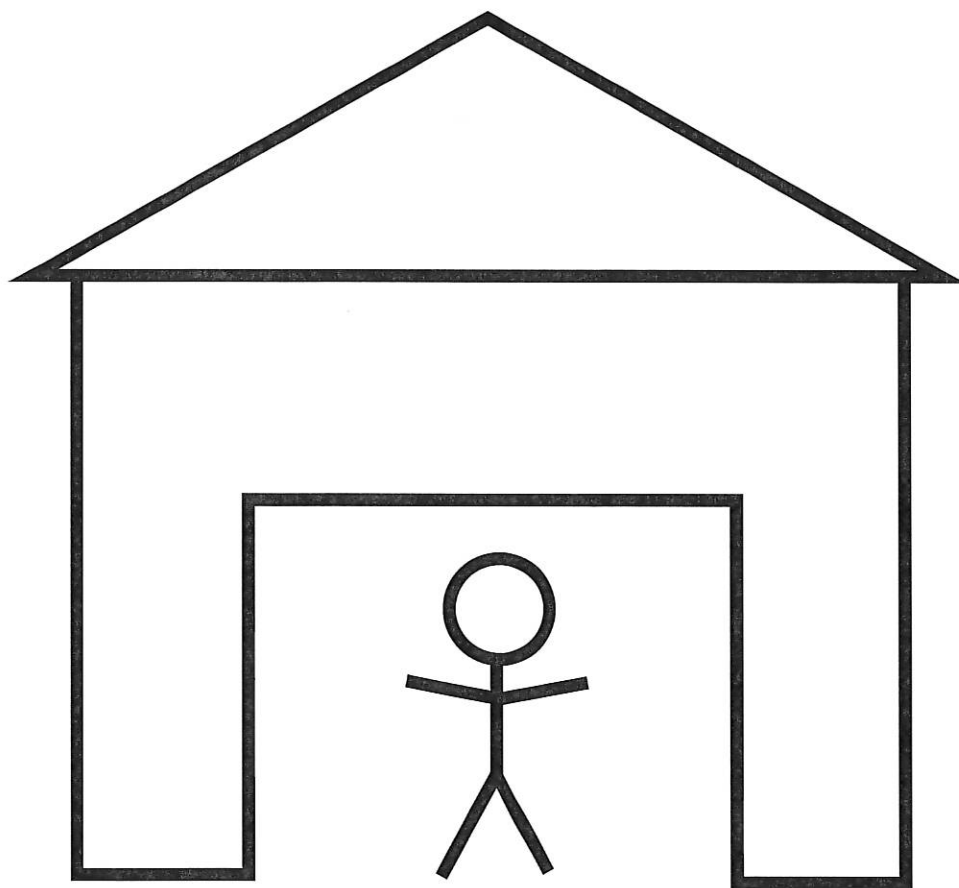


6. Emma was running in a 5 mile marathon. With the end in sight she sprinted past Chloe who was in second place and triumphantly crossed the finish line.

Why didn't Emma win the marathon?



**Can you copy the image below
without ever lifting your pen
from the paper?
(it is possible!)**



Diamond Math Problems

Name: _____ Date: _____



Complete the diamond problems. The top cell contains the *product* of the numbers in the left and right cells, while the bottom cell contains the *sum*.

(1)	$\begin{array}{c} \diagup \quad \diagdown \\ -12 \quad +9 \\ \diagdown \quad \diagup \end{array}$	(2)	$\begin{array}{c} \diagup \quad \diagdown \\ -2 \quad +9 \\ \diagdown \quad \diagup \end{array}$	(3)	$\begin{array}{c} \diagup \quad \diagdown \\ +7 \quad +12 \\ \diagdown \quad \diagup \end{array}$	(4)	$\begin{array}{c} \diagup \quad \diagdown \\ +9 \quad -8 \\ \diagdown \quad \diagup \end{array}$
(5)	$\begin{array}{c} \diagup \quad \diagdown \\ -2 \quad +5 \\ \diagdown \quad \diagup \end{array}$	(6)	$\begin{array}{c} \diagup \quad \diagdown \\ -32 \quad +4 \\ \diagdown \quad \diagup \end{array}$	(7)	$\begin{array}{c} \diagup \quad \diagdown \\ -36 \quad -9 \\ \diagdown \quad \diagup \end{array}$	(8)	$\begin{array}{c} \diagup \quad \diagdown \\ +8 \quad -3 \\ \diagdown \quad \diagup \end{array}$
(9)	$\begin{array}{c} \diagup \quad \diagdown \\ \quad -10 \\ -1 \quad \diagup \end{array}$	(10)	$\begin{array}{c} \diagup \quad \diagdown \\ -33 \quad +11 \\ \diagdown \quad \diagup \end{array}$	(11)	$\begin{array}{c} \diagup \quad \diagdown \\ 10 \quad +2 \\ \diagdown \quad \diagup \end{array}$	(12)	$\begin{array}{c} \diagup \quad \diagdown \\ -40 \quad -10 \\ \diagdown \quad \diagup \end{array}$
(13)	$\begin{array}{c} \diagup \quad \diagdown \\ \quad +11 \\ 5 \quad \diagup \end{array}$	(14)	$\begin{array}{c} \diagup \quad \diagdown \\ 8 \quad +1 \\ \diagdown \quad \diagup \end{array}$	(15)	$\begin{array}{c} \diagup \quad \diagdown \\ -4 \quad 6 \\ \diagdown \quad \diagup \end{array}$	(16)	$\begin{array}{c} \diagup \quad \diagdown \\ -36 \quad +4 \\ \diagdown \quad \diagup \end{array}$
(17)	$\begin{array}{c} \diagup \quad \diagdown \\ -64 \quad -8 \\ \diagdown \quad \diagup \end{array}$	(18)	$\begin{array}{c} \diagup \quad \diagdown \\ -11 \quad -1 \\ \diagdown \quad \diagup \end{array}$	(19)	$\begin{array}{c} \diagup \quad \diagdown \\ \quad -5 \\ 3 \quad \diagup \end{array}$	(20)	$\begin{array}{c} \diagup \quad \diagdown \\ -81 \quad 0 \\ \diagdown \quad \diagup \end{array}$
(21)	$\begin{array}{c} \diagup \quad \diagdown \\ 21 \quad 10 \\ \diagdown \quad \diagup \end{array}$	(22)	$\begin{array}{c} \diagup \quad \diagdown \\ -11 \quad 10 \\ \diagdown \quad \diagup \end{array}$	(23)	$\begin{array}{c} \diagup \quad \diagdown \\ 33 \quad 14 \\ \diagdown \quad \diagup \end{array}$	(24)	$\begin{array}{c} \diagup \quad \diagdown \\ 16 \quad 10 \\ \diagdown \quad \diagup \end{array}$
(25)	$\begin{array}{c} \diagup \quad \diagdown \\ -30 \quad 1 \\ \diagdown \quad \diagup \end{array}$	(26)	$\begin{array}{c} \diagup \quad \diagdown \\ -8 \quad 7 \\ \diagdown \quad \diagup \end{array}$	(27)	$\begin{array}{c} \diagup \quad \diagdown \\ 18 \quad 11 \\ \diagdown \quad \diagup \end{array}$	(28)	$\begin{array}{c} \diagup \quad \diagdown \\ -4 \quad 3 \\ \diagdown \quad \diagup \end{array}$

Name : _____

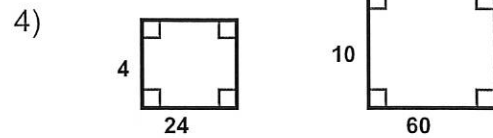
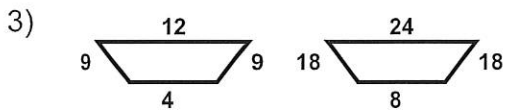
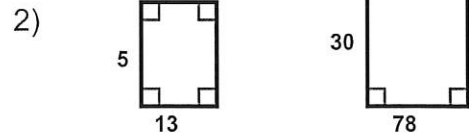
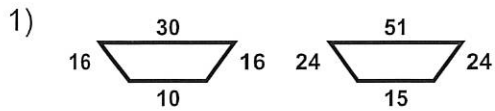
Score : _____

Teacher : _____

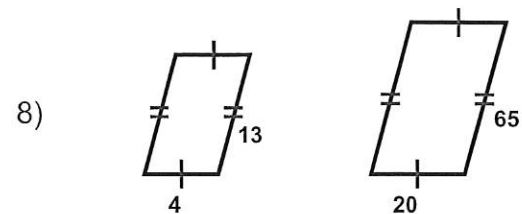
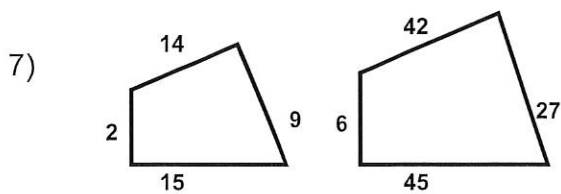
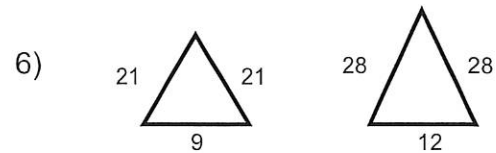
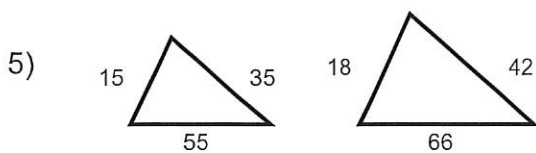
Date : _____

Similar Polygons

Determine whether the polygons are similar.



Each polygon pair is similar. Find the scale factor of the smaller shape to the biggest shape.



Name : _____

Score : _____

Teacher : _____

Date : _____

Solving Proportions

Solve each problem. Leave answer as fraction in simplest form.

1) $\frac{b}{9} = \frac{8}{11}$

6) $\frac{f}{5} = \frac{2}{10}$

2) $\frac{2}{9} = \frac{y}{26}$

7) $\frac{2}{5} = \frac{s}{7}$

3) $\frac{n}{6} = \frac{5}{23}$

8) $\frac{13}{8} = \frac{1}{x}$

4) $\frac{28}{8} = \frac{3}{r}$

9) $\frac{6}{9} = \frac{8}{z}$

5) $\frac{3}{7} = \frac{d}{16}$

10) $\frac{6}{v} = \frac{7}{11}$



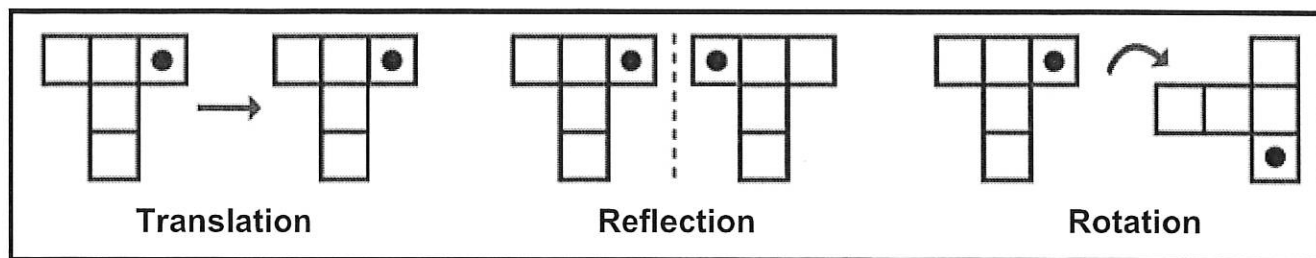
Name : _____

Score : _____

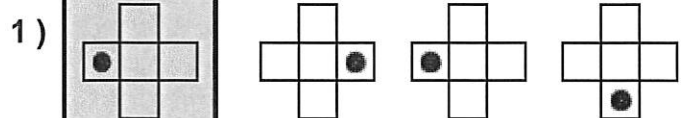
Teacher : _____

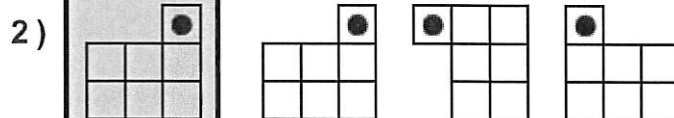
Date : _____

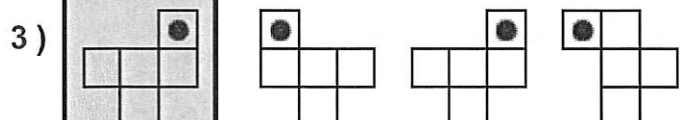
Translation, Rotation, and Reflection

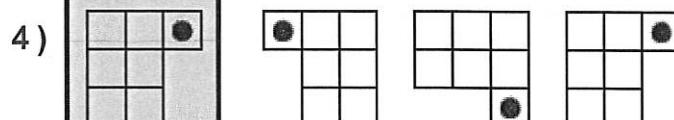


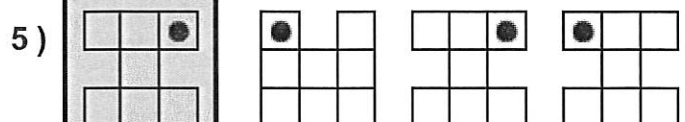
Identify each shape as translation, rotation, and reflection.

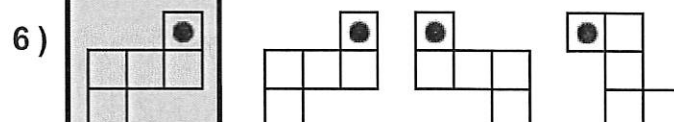


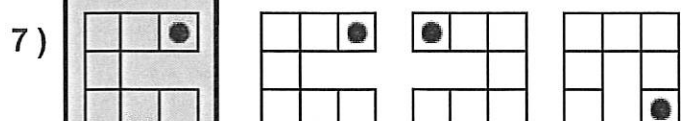


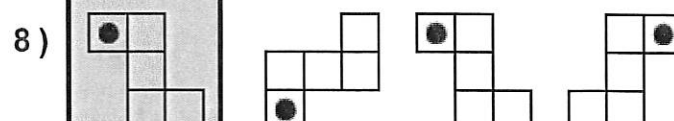














Name : _____

Score : _____

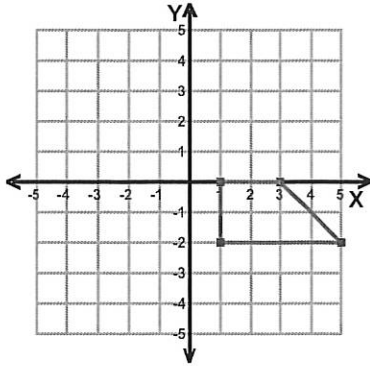
Teacher : _____

Date : _____

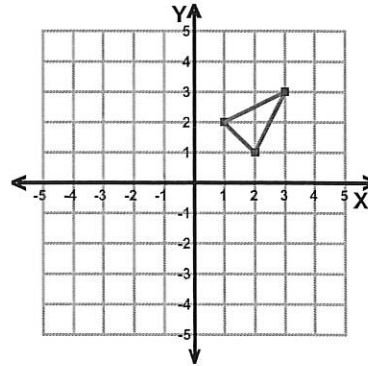
Transformations

ccw = counterclockwise

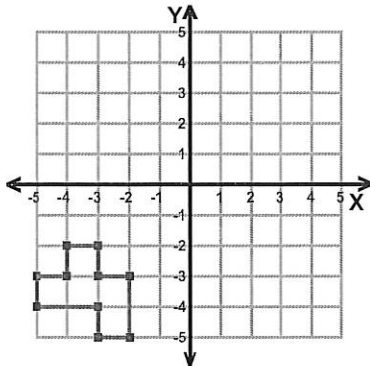
- 1) Reflection: Across the line $x = 1$



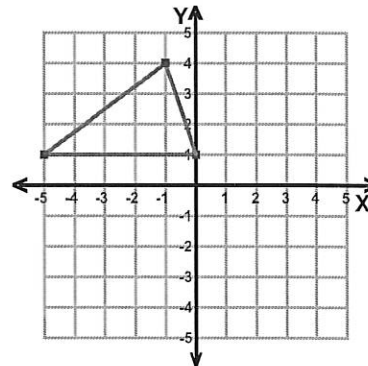
- 2) Rotation: 90° ccw about the origin



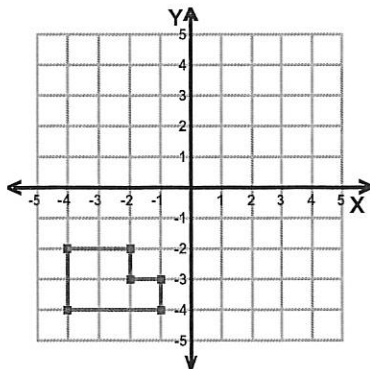
- 3) Translation: 3 right and 3 up



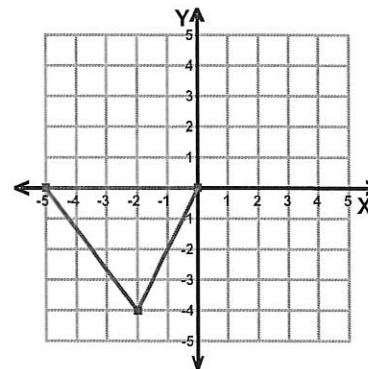
- 4) Reflection: Across the line $y = 1$



- 5) Translation: 2 right and 5 up



- 6) Rotation: 180° about the origin



Name : _____

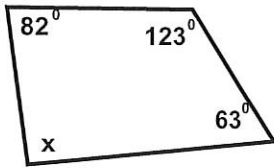
Score : _____

Teacher : _____

Date : _____

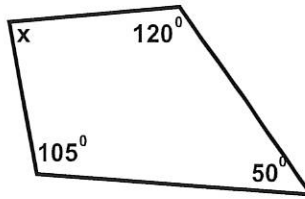
Find the measure of the missing angle.

1)



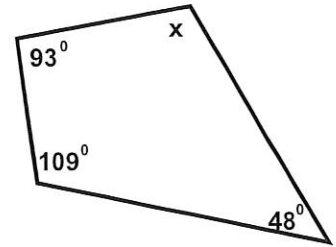
Solve for x _____

2)



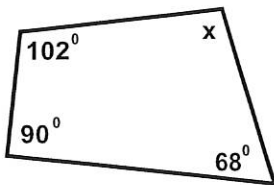
Solve for x _____

3)



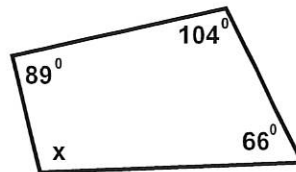
Solve for x _____

4)



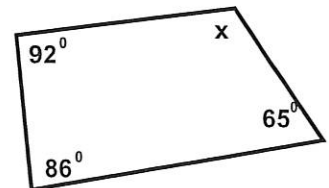
Solve for x _____

5)



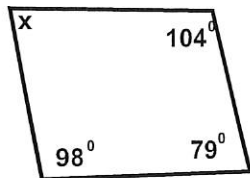
Solve for x _____

6)



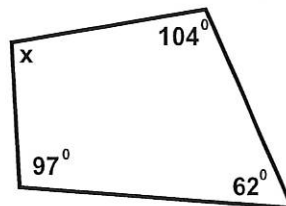
Solve for x _____

7)



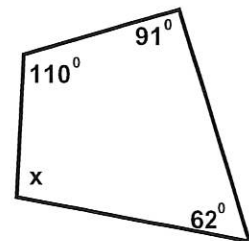
Solve for x _____

8)



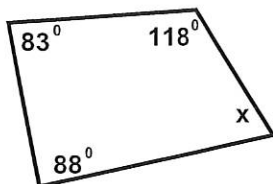
Solve for x _____

9)



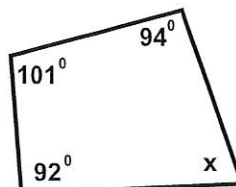
Solve for x _____

10)



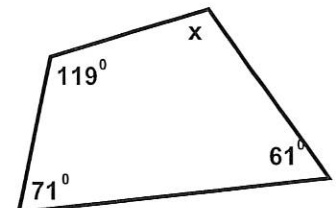
Solve for x _____

11)



Solve for x _____

12)



Solve for x _____



Name : _____

Score : _____

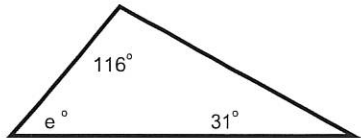
Teacher : _____

Date : _____

Triangle Angle Sum

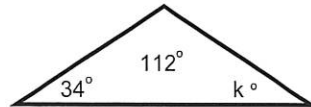
Solve for the given variable.

1)



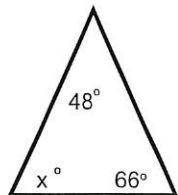
$$e = \underline{\hspace{2cm}}$$

5)



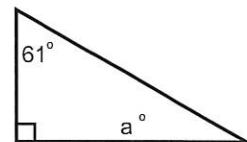
$$k = \underline{\hspace{2cm}}$$

2)



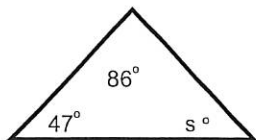
$$x = \underline{\hspace{2cm}}$$

6)



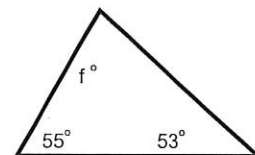
$$a = \underline{\hspace{2cm}}$$

3)



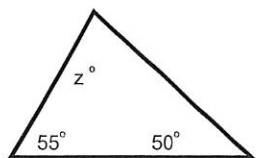
$$s = \underline{\hspace{2cm}}$$

7)



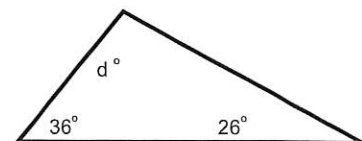
$$f = \underline{\hspace{2cm}}$$

4)



$$z = \underline{\hspace{2cm}}$$

8)



$$d = \underline{\hspace{2cm}}$$

