

**1** What shape am I?

- a) four sides; all sides equal; four right angles \_\_\_\_\_
- b) four sides; opposite sides equal; four right angles \_\_\_\_\_
- c) four sides; opposite sides parallel; no right angles \_\_\_\_\_
- d) four sides; exactly two sides parallel \_\_\_\_\_
- e) four sides; opposite sides equal; no sides perpendicular \_\_\_\_\_
- f) four sides; opposite sides parallel; adjacent sides perpendicular \_\_\_\_\_
- g) four sides; all sides equal; no sides perpendicular \_\_\_\_\_
- h) four sides; no sides parallel; no sides perpendicular \_\_\_\_\_

**2** Below is a drawing of a straight angle  $\angle BAE$  (remember that a straight angle is always  $180^\circ$ ). The angle  $\angle DAE$  equals  $75^\circ$  and the angle  $\angle BAC = 25^\circ$ .

a) Find an angle  $\angle CAD =$

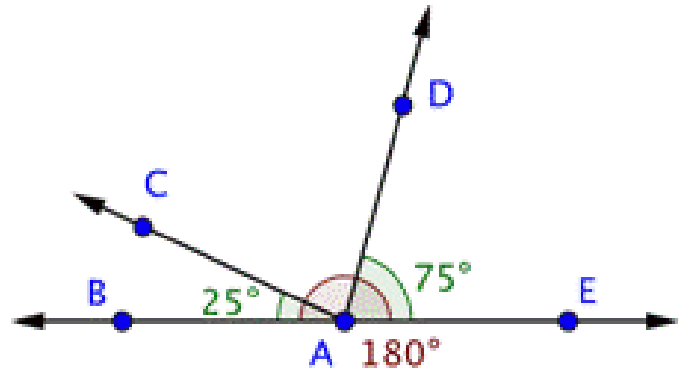
\_\_\_\_\_

b) Find an angle  $\angle BAD =$

\_\_\_\_\_

a) Find an angle  $\angle CAE =$

\_\_\_\_\_



**3** Calculate (simplify to the lowest term where possible)

$$\frac{12}{15} - \frac{3}{15} =$$

$$\frac{9}{50} + \frac{21}{50} =$$

$$\frac{18}{35} - \frac{13}{35} =$$

Homework 28

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a) Find the coordinates of each vertex of triangle QPR

Q( , )    P( , )    R( , )

b) Reflect this triangle horizontally (flip across y-axis) to get a triangle Q'P'R'

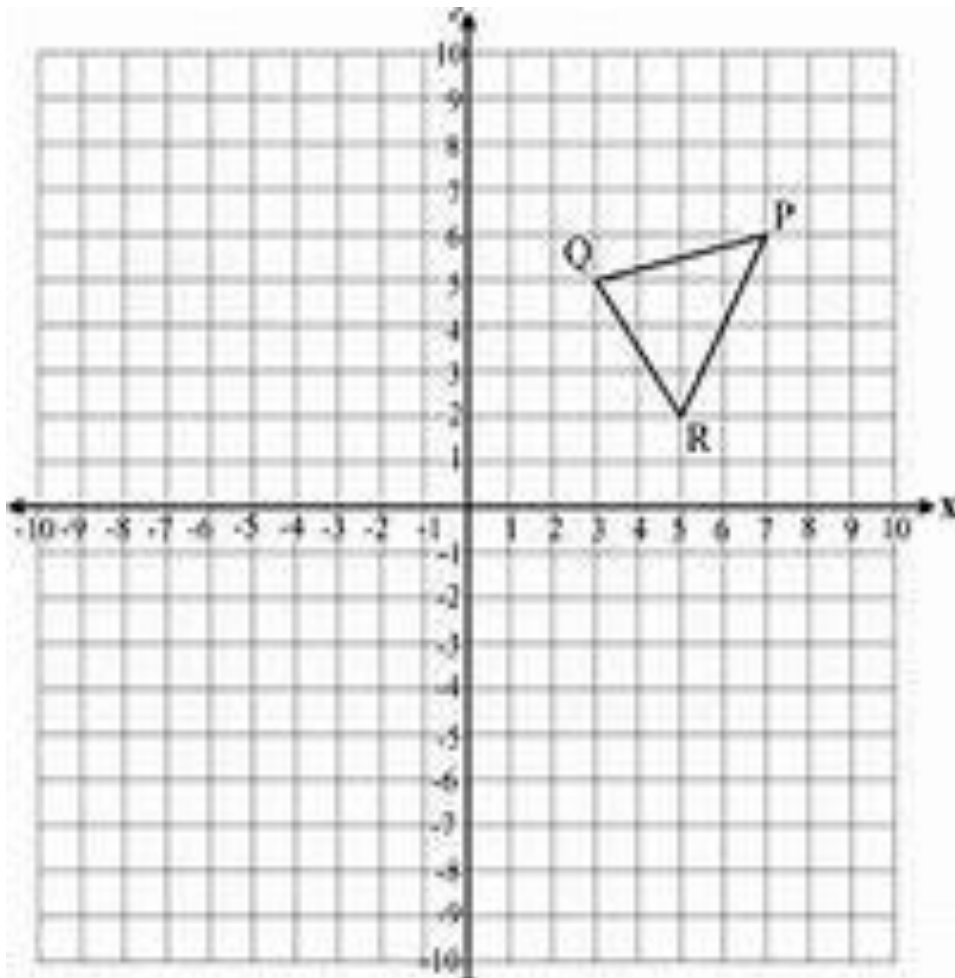
Find the coordinates of each vertex:

Q'( , )    P'( , )    R'( , )

c) Reflect this triangle vertically (flip across x-axis) to get a triangle Q''P''R''

Find the coordinates of each vertex for reflected triangle L''K''M'':

Q''( , )    P''( , )    R''( , )



Insert the missing fraction:

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a) \_\_\_\_\_ +  $\frac{1}{6}$  =  $1\frac{5}{6}$

b)  $2\frac{3}{5}$  + \_\_\_\_\_ =  $5\frac{4}{5}$

c)  $\frac{3}{7}$  + \_\_\_\_\_ =  $3\frac{4}{7}$

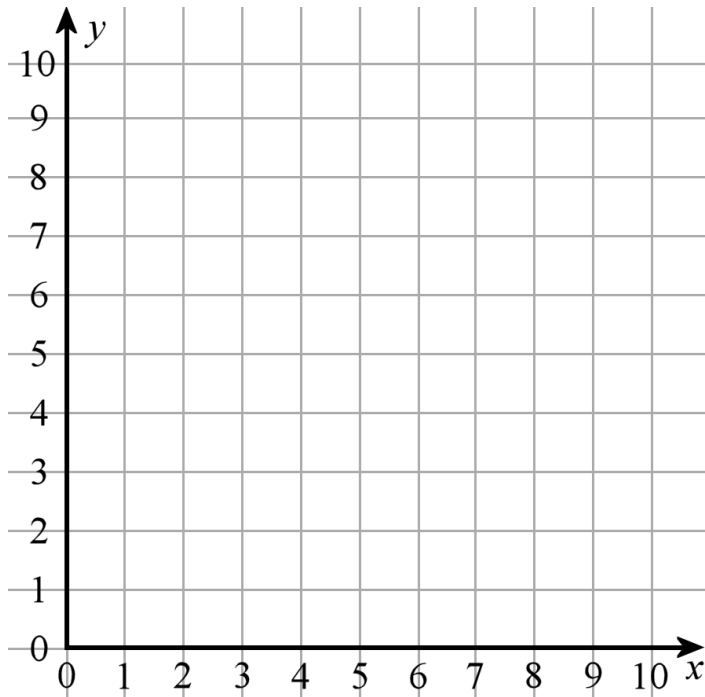
d) \_\_\_\_\_ +  $\frac{3}{8}$  =  $8\frac{5}{8}$

e) \_\_\_\_\_ +  $5\frac{2}{9}$  =  $10\frac{4}{9}$

f) \_\_\_\_\_ -  $\frac{4}{5}$  =  $9\frac{1}{5}$

Homework 28

- 6
- Draw a circle with center point  $(5,6)$  and a radius of 3 units.
  - Draw another circle with the same center point but double the radius.
  - How many common points your second circle has with x-axis? \_\_\_\_\_
  - How many common points your second circle has with y-axis? \_\_\_\_\_



7 Write down the expressions:

- Milan spent  $\$a$  for a soccer ball. It was  $\$14$  less than he spent for his soccer cleats. Write an expression for a cleats's price.  
\_\_\_\_\_
- There are  $b$  boys in the class who play soccer,  $c$  boys in the class who play tennis and 4 boys who don't do any sport. Write an expression for a total number of boys in the class.  
\_\_\_\_\_
- The distance between your house and a school's bus stop is  $a$  meters, the distance between bus stop at school and your class is  $b$  meters. What is the distance you walk every day on your way to and from school?—  
\_\_\_\_\_

8 Calculate:

$5 + 3 =$	$5 + (-3) =$	$5 - 3 =$	$5 - (-3) =$
$-5 + 3 =$	$(-5) + (-3) =$	$(-5) - 3 =$	$(-5) - (-3) =$

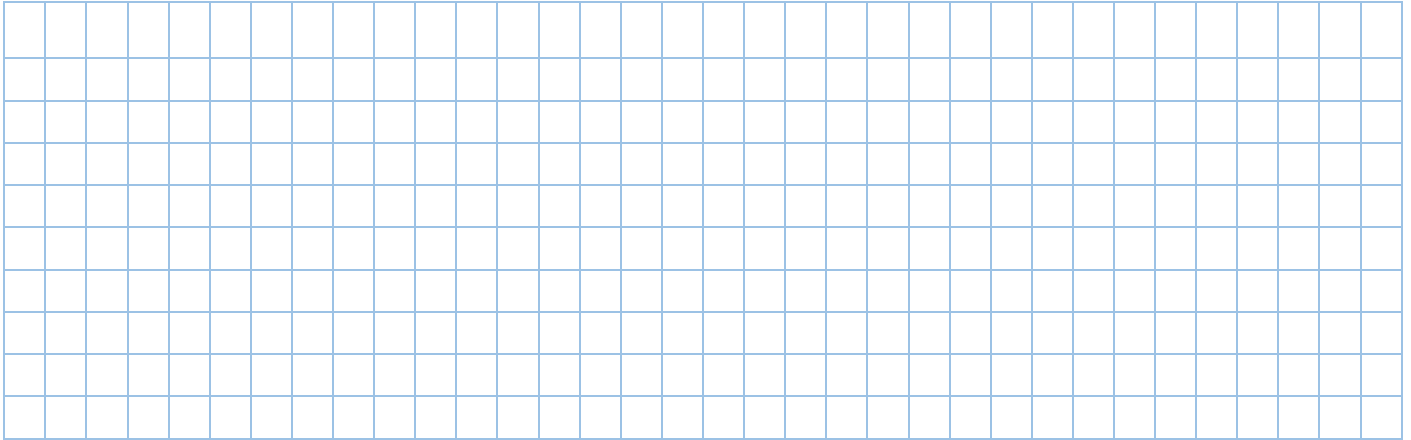
Homework 28

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Calculate:

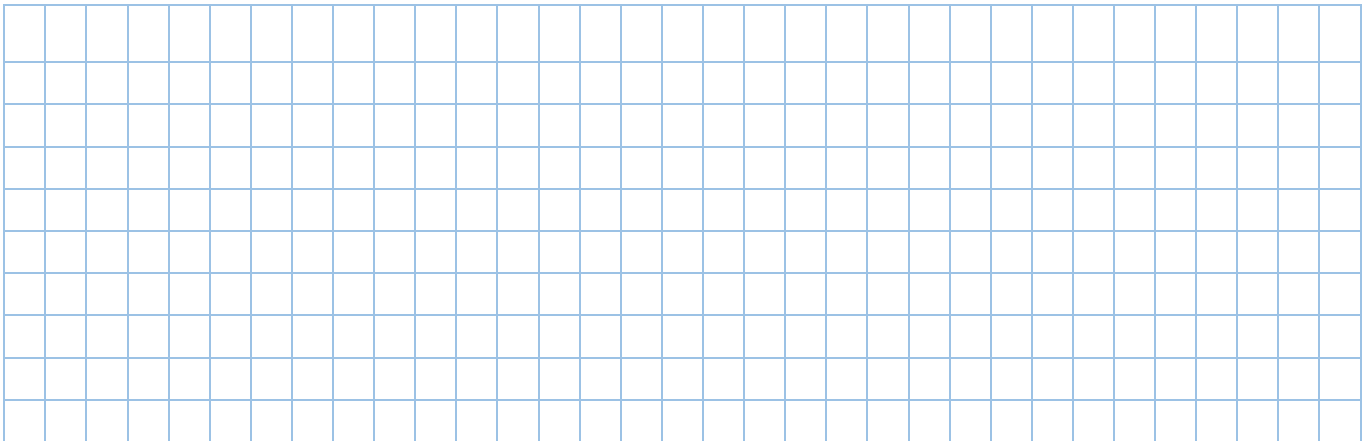
a)  $2,501 + 4,359 - 325 =$

b)  $4,302 - 870 + 399 =$



c)  $2,536 \div 8 =$

d)  $126 \times 35 =$



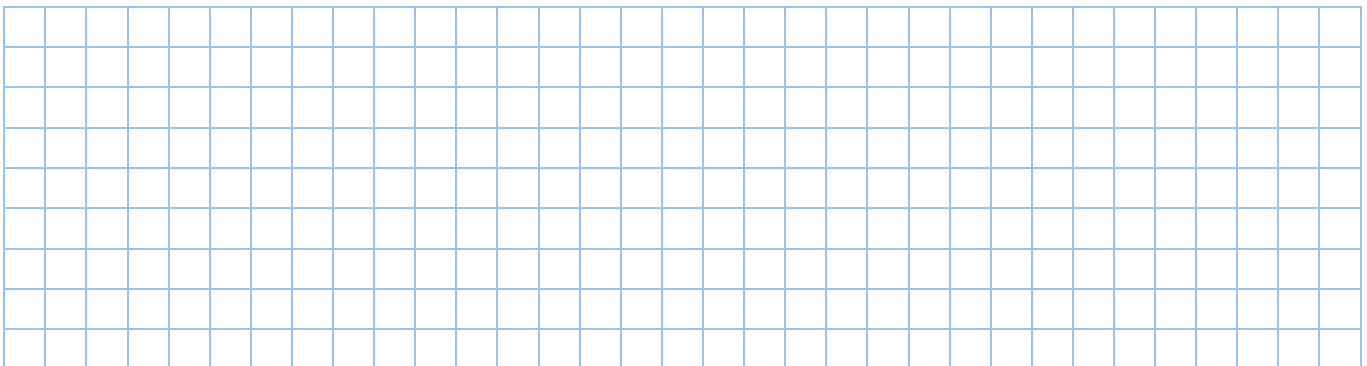
10

Solve the following equations using an inverse operation.

a)  $4x + 35 = 5$

b)  $x \div 3 - 4 = 26$

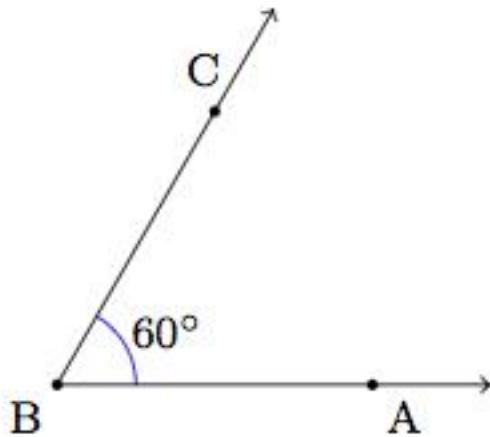
c)  $4z + 5\frac{1}{2} = 6$



Homework 28

An angle below measures  $60^\circ$  degrees:

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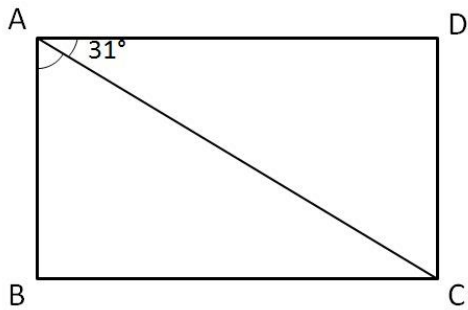


a) Draw another angle that measures  $25^\circ$  degrees. It should have the same vertex and share side  $BA$ .

b) How many angles are there in the figure you drew? What are their measures?

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a) In the figure,  $ABCD$  is a rectangle and  $\angle CAD=31^\circ$ . Find  $\angle BAC$ .



$\angle BAC =$  \_\_\_\_\_

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Open parenthesis and simplify the expressions:

$$5(3 - a) + 4(a - b + 10) = \underline{\hspace{10em}}$$

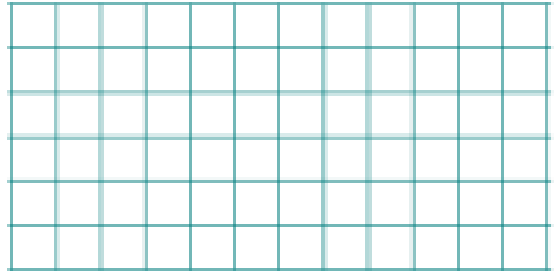
$$10(d + 4) - 8(7 - d) = \underline{\hspace{10em}}$$

$$3(20 + z) - 2(10 - z + a) = \underline{\hspace{10em}}$$

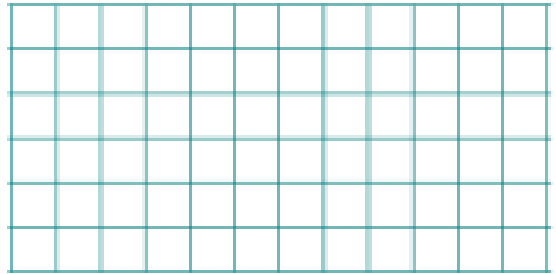
**14**

Write down a mathematical expression to solve the problems:

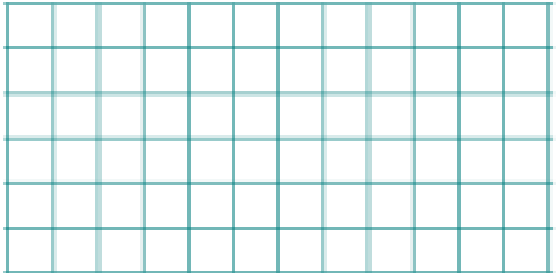
a) There is a total of 50kgs of potatoes packed in the 10 identical bags. How many kgs of potatoes are in  $x$  such bags?



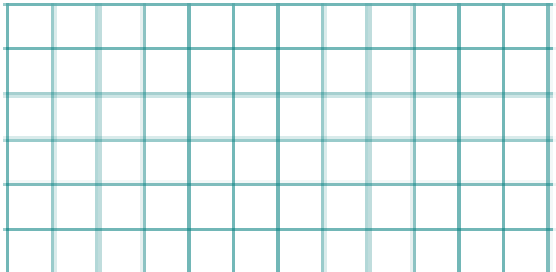
b) There are  $x$  kgs of potatoes packed in 12 identical bags. How many kgs of potatoes are in  $b$  such bags?



c) There are  $x$  kgs of potatoes packed equally into 10 bags. How many bags will be needed to pack  $z$  kgs of potatoes?



d) A construction crew repairs 600 meters of a road in one day. How much can be repaired in 9 days?



e) A construction crew repairs 600 meters of a road in one day. How much time is needed to repair 5km of the road?

