Math 3   Homework 14

1 Calculate:

a) 999 + 1 =   199 + 1 =   79 + 1 =   629 + 1 =

1000 – 1 =   810 – 1=   500 – 1 =   1991 – 1 =

b) 2000 + 400 + 30 + 1 =   7000 + 20 + 7 =

9000 + 30 + 3 =   1000 + 700 + 20 + 6 =

c) Calculate the fastest way (rewrite the expression to show your way of calculation):

(303 + 274) + 26 =   81 + (9 + 27) =

(437 +92) – 37 =   (364 +415) – 264 =

d) Increase the numbers in 10 times: 60, 600, 15, 150, 435

_____

2 a) Determine order of operations and calculate:

800 – 420 – 120 + 40 =   800 – (420 – 120) + 40

800 – 420 – (120 + 40)   800 – 120 + 8 × 20 =

b) Insert parentheses to make the equations correct:

32 – 2 × 6 + 3 = 183   32 – 2 × 6 + 3 = 17

32 – 2 × 6 + 3 = 23   32 – 2 × 6 + 3 = 270

3 a) Put all weights in order from the heaviest to the lightest:

2 kg,   1kg 900g,   250g,   25kg,   2,500g,   2kg 50g

_____

b) Put all lengths in order from the smallest to largest:

3m 3dm,   30dm,   333cm,   3dm 3cm,   303cm

_____

Report the time you spent: _____

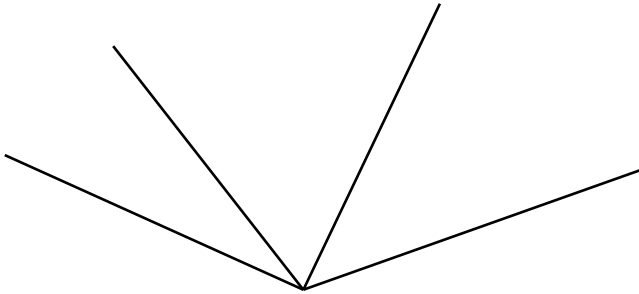**4**

Let's count angles.

How many angles are on the sketch below? Name all angles using capital letters and

list all angles here: _____

list only obtuse angles here: _____

list only acute angles here: _____

If you are not sure, use the right angle template to confirm your answer:

5.

What types of angles are formed by the hour hand and the minute hand on the clock face at the following times (right, obtuse, acute, straight) ?

a) 3 o'clock - angle _____   b) 4 o'clock - angle _____

c) half past 9 - angle _____   11 o'clock - angle _____

6.

Using the squared piece of paper below, draw a rectangle with a length of 8 square segments and the width of 6 square segments.
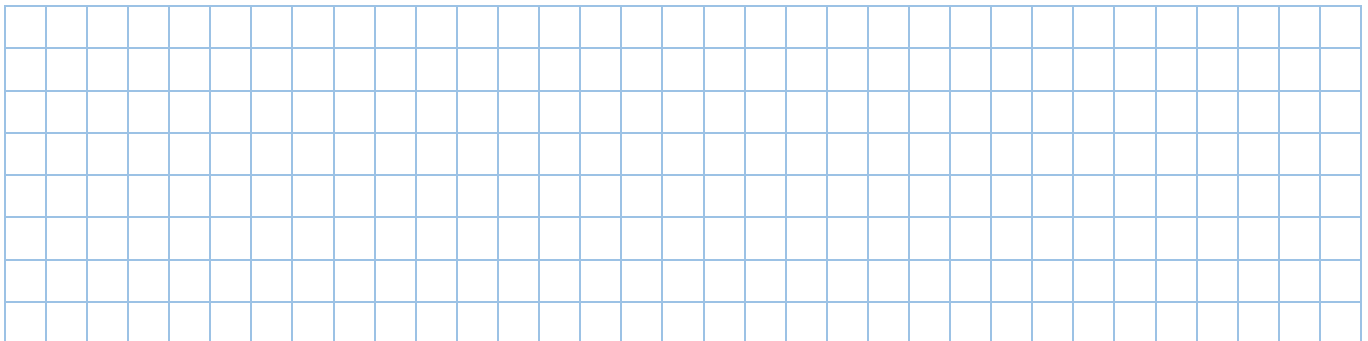
Find the perimeter of the rectangle you draw. P = _____

With one straight line, divide the rectangle into two identical rectangles.

Find the perimeter of each smaller rectangle.

Consider two different cases. P_1 = _____ P_2 = _____

7

Construct a line parallel to the line A_0A_2 on the distance of 3cm away from line A_0A_2. Call it B_0B_2
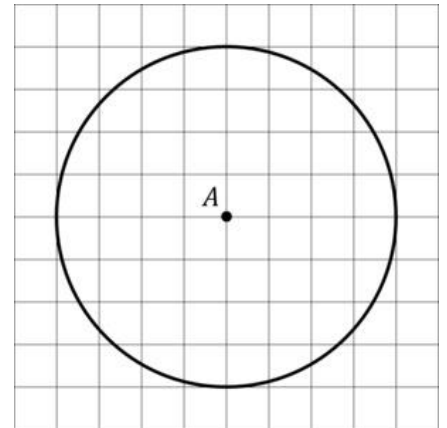
Reminder:

1 Use your protractor to draw a line that goes through A_0 and is at 90° to the line A_0A_2.

2. Use a ruler and measure the distance of 3 cm from the point A_0. Label the point B_0

3. Repeat the procedure for the point A_2.

4. Connect points B_0 and B_2 by a straight line.

A_2

A_0
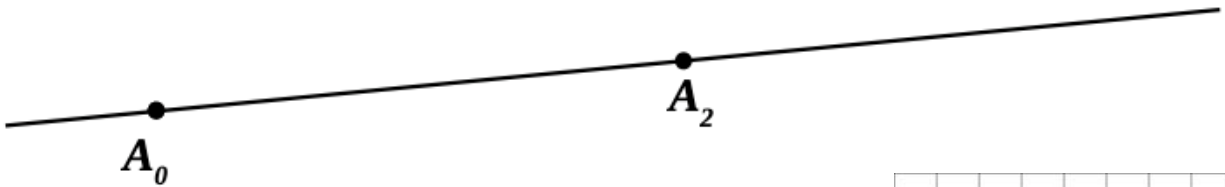
8

A circle with center A is drawn on 1cm grid paper as shown below. What is the radius of the circle?

Draw another circle with a radius 2 times less than the radius of the circle on the picture.

A

9

Reminder: **Adjacent angles** *share a side and a vertex.*

Complementary angles *have measures that add up to 90 degrees.*

Supplementary angles *have measures that add up to 180^0 degrees.*

a) Find the pairs of supplementary angles and circle these pairs:

15^0 and 165^0 30^0 and 155^0 45^0 and 125^0

b) Find the pairs of complementary angles and circle these pairs:

15^0 and 75^0 25^0 and 65^0 20^0 and 60^0

10

We know that:

- Angles a and c are complementary angles
- The measure of angle $d = 124^0$
- The measure of angle $c = 56^0$
- Angles c and e have equal measures.

Find: The measure of angle b.

Find the measure of angle b.

Angle $b =$

11 Use long multiplication to find answers to each of the following problems:

$44 \times 7 =$ $65 \times 3 =$ $45 \times 4 =$

12 Use partial method to solve:

$123 \times 14 =$ $123 \times 45 =$ $123 \times 60 =$

13 The table below consists of 8 columns and 6 rows. Is it possible to place check mark symbols in such a way?

a) to get 4 check marks in each row and 3 check marks in each column?

b) to get 3 check marks in each row and 2 check marks in each column?